1.

G10 Focus test: Using the convention in-in / out-out
when C is to violet we must turn focus knob
clockwise, i.e. towards bigger numbers.
Always take up slack in the ~~clockwise~~ counterclockwise direction.
(use edge of blackened portion rather than bare brass surface as indicator for sake of consistency) i.e. make final setting turning to smaller numbers.

On C40: Using the convention in-in / out-out
when c is to violet we must turn focus knob
to smaller numbers

Always take up slack by going to a much
smaller numbers first and then increase
number to desired one.

3.

Dome Temp.

Focus

Dome Temp.

Hour Angle End	Dec

ome Temp. ....

ocus ....

ome Temp. ....

Transparency Conditions ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality

David Dunlap Observatory

74" Logbook

Volume 34

Plate Nos. 27850 - 28444

October 1964 - June 1965

Date Oct 14-15, 1964 (Wed-Thu) **Observer** Fl, Rc, ~~Wo~~ mse / Hv **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle End
27850	γ Aql	19h 41.5m	+10° 22′	G10	IIaOb	9 short	59°	19:30	45 21:00	C	2h 28m W
2785~~1~~ 0	HD 19(5)16 φ Per	1 37.4	+50 11	G10	IIaOb	9 short	55°	21:20	25 22:10	A	2h 19m E
2785~~2~~ 1	HD 223368 ι Psc	23 34.8	+ 5 05	G10	IIaOb	9 short	54°	22:23	100 01.43	B	03 19 W
2785~~3~~ 2	HD 18884 α Cet.	2h 57.1	+03 42	"	"	"	52	02 00	60 04 00	A	02 13 W
2785~~4~~ 3	HD 36673	05 28.3	-17 54	"	"	"	51°	04 17	15 04 47	B	00 30 W
2785~~5~~ 4	HD 62509	07 39.2	+28 16	"	"	"	52°	05 03	6 05 15	A	01 14 E
2785~~5~~ 4 F	Focus TEST		IN-IN/OUT-OUT							B	

Hd Oct 15 — If C is to violet we must move PH away from mirror, i.e. to correct the Te[…] I backed off N screw 1/6 turn, advanced S 2½/6 to make it just snug […]

27854 F2 — Focus test In-in/out-out. 67° — C

Over-did it. So I advanced N screw 1½/6 turn, backed off S 1½/6

27854 F3 — Focus test In-in/out-out — C — Shows C very sli[…]

So I ~~turned~~ backed off S screw by ½/6 turn and advanced N screw ½/6 turn and moved PH toward mirror

1st Half - Trolley skipped off wire for shutter power - replaced. (Many sparks). ∴ reset focus from 2.50 to 2.45 ★

27854 F4 — Focus test In-In/out-out — a little better but still e Fred viewed — 5 sec each — C — Note Plat[…]

27854 T — Slit width test. Thro' East prism 9, thro center ~~12~~ 9, thro west prism 15 — 6 sec each — C — Sillingon […]

Dome Temp. 59° F

Focus

Dome Temp.

Transparency Conditions Moon - Fair
0030 Quite Windy Tel. Unsteady

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2h 28m W	+10° 37'	0-1	4.15	K3II	2-2-2	★ See Note Below Bright Std. Vel.	broken - not useful.
2h 19m E	-	0-1	3.95	B0p	2-2-2	Special Star For G10	fine.
03 19 W	+05 28	0-0	4.8	F7V	2-2-2	Bright Std. Vel.	fine
02 13 W	+03 59	00	4.17	M2III	2-2-2	* " " "	fine
00 30 W	-17 49	00	2.80	F0Ib	2-2-2	" " "	l weak
01 14 E	+28 08	00	2.18	K0III	2-2-2	* " " "	l [illegible]
					5/5	1" Broke off.	sl centre to red in violet; sl centre to violet in red

error move {south / red} end away i.e. back of N screw, advance S screw. snug with a wrench

5-5 * Plates Jamming in P.H. "A" — Red: C to red; Vi: C to vi.

PH "A" seems to be leaking.

Shows C much to red in the red very slightly to red in centre in vi. 5-5 PH. A being retired for time-being.

★ Troubles opening shutters - fuses blown.

Note: Plate broke as slide being inserted at exposure end - half of plate popped up and was left sitting on slide - could have fallen into spectrograph but luckily didn't. Remainder of Plate left in (C) plateholder - F.L. (Not numbered)

Date Thurs Oct 15-16/64 **Observer** L- ~~Wo~~ Moffat Mae Mt **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.F.	Hour Angle End
27855	HD 186791 γ Aql	19h 41.5m	+10° 22'	G10	IIa0-8	9 short	67°F	18h 45m 66	20 57	C	1 33W
27856	HD 209008	21h 55.1m	+6° 14'	G10	IIa0-8	9 short	63°F	20h 10m 120	00 10	B	3 35W
27857	HD 10516 φ Per	1h 37.4m	+50 11	"	"	"	59°F	00 30 18	01 05	C	0 50W
~~27858~~	~~α Per~~									~~B~~	

At 1:20, one of the 3 wires around ~~the~~ dome broke.
Dome was in a position to ~~do~~ so.
Closed shutters by hand Whew!!!

Oct 16/64 Backed off S 1/4 turn advanced N 1/4 reset focus 2.40 E

27857F1 Focus test in-in/out-out 71F C

~~2785~~ C is to red at both ends about equally and seems

reset focus 2.20

27857F2 Focus test in in/out out 71F C

centre still to red Focus should be Tried

I set

Dome Temp. 66°F

Transparency Conditions

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1 33W	10 33	0	4.15	K3II	2-2-2	Bright Std Vel.	fine
3 35W	+6° 35'	0	5.99	B3III	2-2-2	INTERSTELLAR LINE PGM.	weak
0 50 W	+50° 30'	1	3.95	Bop	2-2-2	Special Stars for G10	fine.

broke. Phoned Gerry. He suggested I close up.

One P.H. loaded (B)
Two unexposed plates in box (spotting room)

30/10

seems less to red in centre! Error in curvature?

10/11.

Tried at 2.00 or less
I set it at 1.90

Date Fr/Sat OCT 16/17 '64 **Observer** vdB Bur Hb **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
27858	= π Aqr HD212571	22h 20m.2	+00° 52′	G10	IIaOb	9 short	63°F	22 13	(30) 23 13	C	02 15 W
27859	MWC 8 HD 4180	00h 39m.2	+47° 44′	G10	IIaOb	9 short	62°F	23 30	(38) 00:45	C	01:28 W
27860	HD 10516 φ Per	01h 37m.4	+50° 11′	G10	IIaOb	9 long	58°F	01 01	(20) 01:41	C	01:25 W
27860 F	Focus TEST				in-in / out-out					B	
{ 27861 A	HD 5394 γ Cas	00h 50m.7	+60° 11′	G 10	IIaOb	9 short		02:01	(2) 02:05	C	02:36 W
27861 B }	"	"	"	"	"	"	59°F	02:11	(4) 02:19	B	02:50 W
(slit) ~~27862~~	~~HD 37202~~ ~~MWC 115~~	~~05h 31m.7~~	~~+21° 05′~~	~~"~~	~~"~~	~~"~~	60°F	02:36	(6) ~~02:48~~	C	~~01:21 E~~
27863 ~~1~~	HD34787	05h 14m.9	+57° 27′	"	"	"	57°F	03:05	(60) 05:05	B	01:11 W
27864	HD 62509 β Gem	07h 39m.2	+28° 16′	"	"	"	56°F	05:19	(1) 05:21	C	00:55 E

27cc replenisher

2 unloaded PH (B+C) in north pier.
14 unexposed plate in north pier (at least 2 are to...)
9 exposed plates in darkroom (1 broken)
Many Orionid meteors ...

Dome Temp.
Focus
Dome Temp.

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions thin Ci

00:40 THICK Ci

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
02 15 W	+01° 13'	2	4.64	B1p	3-3-3	Int. H.V clouds	Too wk
01:28 W	+48° 05'	1-2	4.7	B4neB	2-2-2	Be progr. Plate too wide... first plate set at angle in "exposed plates" box. HL	good (guiding)
01:25 W	+50° 30'	1-2	3.95	B0p	2-2-2	Special Star for G10	fine
					5/5		focus OK
02:36 W	+60° 32'	2	2.01	B0p	2-2-2	Be Prog (Special Star for G10) }	guiding wk
02:50 W	"	2-3	"	"	2-2-2	" " } save the small piece	fine
~~01:21 E~~	~~+21° 08'~~	~~2~~	~~3.0~~	~~B3e~~	2-2-2	~~Be PROG (Special Star for G10)~~ OK PLATE BROKEN	NG
01:11 W	+57° 31'	2	5.25	A0	2-2-2	Interstellar High Vel Clouds	dark.
00:55 E	+28° 06'	1	2.18	K0III	3-3	Bright Std Vel. Stars	

all plates wk developed

1° Radar - Lite not working

2° No screwdriver for Brown in dome

3° Light in N. pier not working

Sud B

RASC ±200 visitors

...2 are too wide for plate holders)

...(1 broken)

...meteors observed.

11. 177 visitors; showed Saturn; Cc, Wi, Cm.

Date Sat/Sun Oct. 17/18, 1964 **Observer** Cw **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
27865	MWC 8 HD 4180	00 39.2	47 44	G-10	IIaOB	short 9	62°F	22:27	68 00:43	C	01 30W
27866	α Cet HD 18884	02 57.1	+03 42	G-10	IIaO-b	" 9	62°F	00:54	60 02:54	C	01 23W
27866F	Focus Test			In - In	- Out	9 Long - Out				C	
27867	α Tau A HD 29139	04 30.2	+16 19	G10	"	"	61°F	03:13	3 03:18	C	00 14W
27868	MWC 115 HD 37202	05 31.7	+21 05	G10	"	"	"	03:28	10 03:48	C	00 17E
27869	MWC 115 HD 37202	"	"	"	"	"	60°F	03:52	8 04:08	C	00 02W
27870	"	"	"	"	"	"	"	04.11	12 04:35	C	00 36W
27871	α Lep HD 36673	05 28.3	-17 54	"	"	"	59°F	04:43	16 05:15	C	01 12W

18 Oct/64 / ~~Wo~~ MSe

27871 F, focus test - in in/out out IIaO-B 60° C

ran dec. slow motion screw back to central position

Dome Temp. 62°F
Focus
Dome Temp. 59°F

Transparency Conditions Bright moon Hazy

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]:43	C	01 30 W	+48 03	0-1	4.7	B4 [illegible]	2-1-2	Special Star for C10 - Be program	fine - guiding
[illegible]:54	C	01 23 W	+03 58	0	4.17	M2 III	2-1-2	Bright Std. Vel. Star	fine
	C						5/5		a rle to vi nearly O.K.
[illegible]:18	C	00 14 W	+16 27	0	1.38	K5 III	3-3	Bright Std Vel.	fine
[illegible]	C	00 17 E	+21 09	0	3.0	B3e	3-3	Special Star for C10 - Be	l strong
4:08	C	00 02 W	"	0-1	3.0	B3e	3-3	"	l strong
4:35	C	00 30 W	"	0	3.0	B3e	3-3	" (probably numbered 2870)	l strong
[illegible]	C	01 12 W	-17 49	00	2.80	F0 Ib	3-3	Bright Std. Vel.	dark.

2 unloaded pH in N. pier
6 unexposed plates in N-pier
8 exposed plates in darkroom

	C	sl centre to violet in red					10-10	C very slightly to vi in red + to red in vi	
[illegible] to		slightly to red in violet							

2 unloaded P.H. in N. pier
6 unexposed plates in N pier; didn't touch — unexposed plates

13.

Date Mon Oct 19-20/64 Observer (Hd) Ma MR Rw — H5 Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
19 OCT/64 / Wo										
27871 F2	focus test - in - in / out out				IIa O-B		54 °F			C
27872,	HD 206778 ε Peg A	21 39.3	+9 25	G10	IIa O-B	9	47	19 07	19 57 (25)	C
27872	HD 217050	$22^h 52.7^m$	+48° 09′	G 10	IIa O-B	9	44°	$20^h 24^m$	close $20^h 5^m$, open $21^h 05^m$, close $21^h 12^m$	B
	″							re open $21^h 58^m$	$24^h 00$	B
27873	φ Per	01 37.4	+50 11	″	″	″	40°	0025	0141 (38)	B
27874	HD 34787	05 14.9	+57 27	″	″	″	36°	0202	0548 (113)	B
Oct 20/64	Hd & Mac						~~46~~			B
27874 F,	Focus Test		in in / out out				46			B

c to vi in the violet 21μ, at centre 14μ, in the red 8μ

Perhaps PH B has built-in Tilt error, ∴ Tilt seemed OK on PH C

anyway to get rid of average c to vi shift of 14μ try adjusting focus ... change

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions ....

Old exposure meter installed Today
N.B. −700 V. on 1P21

PH	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
C						10·10	5 unexp. plates in n. pier	excellent focus
C	E 9m.	+9° 43′	0-1	3.82	K2Ib	2-2-2	Bright Std Vel prog. Turning pt. at 8 for 1st 30 counts. Seas 6 (2808 2842)	[illegible]
B	W 2h 42m	+48° 30′	0-1	5.2	B4 nep	2-2-2	special stars for [illegible] 7. 2842 2877	[illegible]
B							quite overcast, 21h 12m – 21h 58m	l wk. ?!
B	01 36 W	50 31	0	3.95	Bop	2-2-2	SPECIAL * Prog. #7 2977 2934	fine
B	02 36 W	57 33	00	5.25	A0	2-2-2	Interstellar Line Prog. #7 2930 2937	l wk
B							[illegible] Plate in [illegible]	
C						10/10	[illegible]	

Note only 55 more 5/8" × 7" IIaO plates

focus to a value about 0.1 bigger
i.e. change focus from 1.90 to 2.50
Did so.

Plate [illegible], [illegible] when [illegible]
[illegible] remains in [illegible] C. in N. pier

P.H.'s B & C & unexposed plates
in Dark Room in Ad. Bldg.

Date THURS. OCT 22-23/64 Observer .... Julian Day ....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
27874 F_2	Mse focus test	in in	out out		IIa O-B		50°			C

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions ....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	C						10-10	left 22 unexp. plates in drkrm in n. pier	good

Date Oct 23-24, 1964 **Observer** Fl — H **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27875	HD 206778 ε Peg A	21h 39.3m	+9° 25'	G10	IIaOL	9L	40°F	19:44	20:45	C
27876	HD 10516 φ Per	1 37.4	+50 11	"	"	"	37	21:53	00 11	C

Dome Temp.
Focus
Dome Temp.
Hour Angle End

0015 Clouds

Dome Temp. 40°F

Focus

Dome Temp.

Transparency Conditions Clouds at beginning of 1st HALF.
17:40 Cleared to Good. (some haze shown by Moon)
18:00 Clouds appearing.
21:30 Clouds [illegible]

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	[illegible]	55	+9° 44′	0	3.86	K2Ib	3-6	Std. Vel. Guiding Difficult: due to clouds. (130) Sec. {3003 3024	weak
[illegible]	[illegible]	0022W	50 32	0-1	3.85	B0p	3-3-3	G10 [illegible] cut off due to clouds? Secs 7 {3035 3177	fine

20 [illegible] Plates [illegible]

Date 24/25 Oct, 1964 **Observer** McL – Hb **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	
27877	HD 10516 φ Per	1h 37.4m	+50° 11′	G10	IIaOb	9L		22 43 ^{47}	0016	
27878	HD 5394 γ Cass	00h 50.7m	+60° 11′	G10	IIaOb	9L	44°F	0034 ^{5}	0044	
27878 F	Focus Test			— lantern plate —			44°F	in – in / out – out		C
27879	HD 20902 α Per	03h 17.2m	+49° 30′	G10	IIaOb	9L	43°F	01:15 ^{5}	01:25	B
27880	HD 29139 α Tau A	04h 30.2m	+16° 19′	G10	IIaOb	9L	43°F	01:45 ^{4}	01:53	
27881	HD 36673 α Lep	05h 28.3m	−17° 54′	G10	IIaOb	9L	44°F	02:14 ^{22}	02:5	
27882	HD 62509 β Gem	07h 39.2m	+28° 16′	G10	IIaOb	9L	44°F	03 37 ^{3}	03 42	
27883	HD 81797 α Hya	09h 22.7m	−08° 14′	G10	IIaOb	9S	44°F	04 07 ^{34}	05:14	B

[redacted] Temp. 43°

[redacted]

[redacted] Temp. 43°F

Transparency Conditions Very Hazy.

0150 — red light not working properly.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[redacted] W	+50° 32'	0-1	3.95	B0p	3-3-3	Special Star Sens 5 {3182 3242}	[illegible]
[redacted] W	+60° 33'	0-1	2.01	B0p	3-3-3	Be PROG Sens 4 {3243 3258}	[illegible] to red [illegible]
					2min / 2min	MAY BE EXPOSED — HAD TO REMOVE BEFORE INSERTING PLATE COVER	
0001 W	+45° 42'	0-1	2.28	F5Ib	3-3-3	Bright Std. Vel. Stars Sens 4 {3280}	poor guiding
[redacted] E	+10° 26'	1	1.38	K5III	3-3-3	" " " " Sens 4 {3282 3303}	guiding
[redacted] E	-17° 52'	0	2.80	F0Ib	3-3-3	" " " " Sens 4 {3303 3322}	fair
[redacted] E	+28° 05'	0-1	2.18	K0III	3-3-3	" " " " Sens 4 {3318 [illegible]}	poor guiding
0214 E	-05° 29'	0	3.42	K4III	3-3-3	" " " " Sens 5 {[illegible]}	fair

[redacted] exposed plates in darkroom
11 unexposed plates in north [illegible]
PH B and C loaded in north pier.
[redacted] plates in north pier for [illegible]

IS THERE A SHORT-CIRCUIT IN THE SLOW MOTION CONTROLS? SPARKS JUMPING BETWEEN BOX AND TELESCOPE WHEN BUTTONS ARE PUSHED — NOT NOTICED UNTIL MIDWAY THROUGH FINAL EXPOSURE

Date Oct 25/26 1964 Su/Mo **Observer** RC Msc SudB Hb **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
27883 F,	focus test -	in in /	out out	G 10	lantern slide		69°F			C
27884	HD 159 561 α Oph	17h 30.3m	+12° 38′	G 10	II a 0·b	9	58°F	18:25	13 18·51	B
~~27885~~	~~HD 198478~~	~~20 45.5~~	~~+45 45~~	~~G 10~~	~~IIaOb~~	~~9~~	~~58°F~~	~~19:05~~	64 21:20	C
~~27886~~ 5	HD217050	22 53.7	+48 09	G 10	II a Ob	9 S	56°F	21:41	87 00 35	B
~~27887~~ 6	HD10516 φ Per	01h 37.4m	+50° 11	G 10	IIaOb	9L	58°F	00:56	94 04 03	B
27888 7	HD 81797 α Hya	09h 22.7m	-08° 14	G 10	IIaOb	9S	55°F	04 26	34 0534	B

9 Unexposed plates in north pier (Box #1)
Lantern slide plates for focus tests in north pier (Box #3)
Exposed plates in darkroom (Box #3)

MADE THE MISTAKE OF HOLDING CONTROL BOX IN HAND AND ALLOWING FOREHEAD TO TOUCH END OF FINDER SCOPE — RESULTS IN A TERRIFIC SHOCK.

— Hb

Dome Temp. 60°F
Focus ——
Dome Temp.

Transparency Conditions partly cloudy ALTO-cumuli 1830
then cirri 1930
SWDEST — Seeing extremely good!

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
					min min 2 - 2	at L. end of exposed plate box # 3 C to red 2 I/u in red 2 I/u in centre 34/u in violet	*
3h 18m W	+12° 35'	1	2.14	A5 III	3-3-3	interstellar line pgm. sens 4 {3397 3413	fine
~~2h 30m W~~	~~+46°0'~~	~~1~~	~~4.9~~	~~B2.5e~~	~~3-3-3~~	~~MWC 353 Be~~ Plate Broken* ~~sens 5 {3413 3448~~	
0423 W	+48° 30'	0-1	5.2	B3ne	3-3-3	MWC 394. Spec Star for G10 sens 5 {3448 3471	lick
0424 W	+50° 31'	0	3.95	B0p	3-3-3	Spec. Star for G10 sens 5 {3472 3528	fine
0150 E	-08° 29'	0	3.42	K4 III	3-3-3	Bright Std Vel Star sens 5 {3529 3569	poor guiding

* Should adjust focus to about 0.9 smaller.
—did so, i.e. set focus 1.60

Oct 26. (Handset fixed by Hn.)

*Plate must have broken during loading or in Telescope. Distribution of fragments shows that a second fracture took place as slide was closed (ph c)

-3° could we have an ashtray in dome?!
-2° Keep 1964 Observer's Handbook in dome
-1° Please provide a box of pencils in dome
0° Repair Flash-lite
1° Screw loose holding top flaps covering mirrors
2° Handset sparking and acting up
Please repair! (Also see Oct 24/25)

23

Mon - Tues

Date Oct 26/27 **Observer** MR - Mt Rr **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
27888 F	Focus Test Oct 26 4.00 pm			G10	Lantern	9	69	in-in	out-out	B
27889	HD 198478	20h 45.5	+45° 45'	"	IIaO Bk	"	62°F	19:48	21:25	B
~~27890~~	~~HD 217050~~	~~22h 52.7~~	~~+48°09'~~	~~"~~	~~"~~		~~53°F~~	~~22:03~~	~~01:45~~	C
Plate 27890 was found broken when removed from										P.H
~~27891~~	~~α Lep. HD 36673~~	~~5h 28.3~~	~~-17 54~~	~~G10~~	~~"~~	~~"~~	~~55°~~	~~02:10~~	~~02:50~~	B
27891 (27892 corrected)	β Gem. HD 62509	7 39.2	+28 16	"	"	"	"	03:15	03:20	B
27890 (27893 corrected)	α Tau A HD 29139	4 30.2	+16 19	"	"	"	"	03:40	03:46	B
27891 (27894 corrected)	α Hya HD 81797	9 22.7	-8 14	"	"	"	"	04:05	05:15	B

EXPOSURE METER NOT WORKING

11 ¼ 13 33

Dome Temp. 62 °F

Focus

Dome Temp. 56°

Transparency Conditions 1900 – good
2300 – hazy, image very kicky
0040 high cloud delays exposure.
0100 Cloud all over
Cleared up about 0200

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
Focus re-set to 1.60 (from 2.50)					2^m–2^m	C still to red by about 10μ so reset focus to 1.20	at center to red ... in center
2:41 W	46°00'	2	4.9	B2Sed	3-3-3	BE Program Special star for G.O. MWC 353 (May be fogged) set ⑦ {3575, 3636}	OK. Lark.
4:53 W	+48°30'	0	5.2	B3me	3-3-3	MWC 394 sens 7 {3638, 3678}	completely out of focus
Same for plate 27891!							
0:37 E	−17°50'	0	2.8	F0 Ib	3-3-3	Bright Std Vel Exp. Meter stopped working	
2:17 E	+28 07	0	2.18	K0 III	9	"	Lark.
1:18 W	+16 27	0	1.38	K5 III	9	"	Lark.
2:05 E	−8 25	0	3.42	K4 III	3-3-3	"	weak.

12 unexposed plates in north pier

Date Oct ~~27-28~~ 28-29, 1964 **Observer** ~~EHV~~, Hd, Fd, Cn, Rc **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
27892	HD 213306 δ Cep A	22 25.4 / 22 27.7 (1960)	+57 54 / +58 13 (1960)	G40	IIaOB	20 Long	56 F	20 04	20 12	A	3^{m} E
~~27893~~	~~HD 200775~~	~~21 00.4~~	~~67 47~~	~~G 40~~	~~IIaOB~~	28 Long	~~57°F~~	~~20 28~~	~~20 58~~	A	2^{h} 15^{m}
27893	HD 218393	23 02.6	44 40	G 40	IIaOB	20 Long	56°F	21 20	22 25	A	01 17 W
27894	HD 8779	01:21.4	-00:55	G 40	IIaOB	20 Long	54 F	22 27	23:40 (37)	B	00 24 W
27894 F	(Changed to G10)			G10		9L	54°				

Oct 29 Hd + L readjusted G10 for more light, i.e. turned grating thru 180° ...

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
27894 F$_2$	Focus test		9in in	G10 / Vid	Lantern Vid	9	50			B
27894 F$_3$	Focus test	In. In/out/out		G10	Lantern	9	50			B
27894 F$_4$	"	"		"	"	9	50			B

Dome Temp. 22 10 / 21 00 / 1 10 21:23

Transparency Conditions Poor

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3m E	58 13	0-1	3.96	G0 F_5–G_2	with 15x filter 1 sec.	Abs. Handbook sens 5 {3770 {3774	DEVELOPED strong
~~2h 10m W~~	~~68 00~~	~~0-1~~	~~7.2~~	~~B5e~~		~~Be Program sens 8 {3775 {3784~~	
01 17 W	50° 00′	0-1	6.8	A4e	1	Be Program (SOME CLOUDS) 8 {3785 {3796	DEVELOPED
00 29 W	−00° 36′	0-1	7.5	K0	1/2	Standard Vel. Star sens 9 {3796 {3840	strong
				2 min — 2 min.		in EXPOSED BOX	[illegible]

Some broken clouds and much dew — dome dripping wet. Closed up

80° for blaze | 22μ [illegible] 54μ [illegible]

3.80 ← 2.6 → 1.20

∴ must return by $\frac{22}{76} \times 2.6 = .76$

∴ set at 3.04

30s/30s [illegible] 54μ in center, 59μ in [illegible]

15s/15s Focus was 1.20 ∴ reset to 3.80

15/15 For F3 ~~from~~ c to r by v 22μ ∴ reset to 3.04

F4 excellent.

27.

Dome Temp.
Focus
Dome Temp.

Date Thurs Oct 29-30/64 **Observer** L — Hd — Cr. **Julian Day** ....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
~~27895~~	~~φ Persei~~	~~1 37.4~~	~~50 11~~	~~G10~~	~~IIaOB~~	~~9~~	~~42~~	~~21 50~~	~~22 08~~	B	{+17
2789~~6~~ 5	HD 9812	1 30.8	58 08	G40	IIaOB	16		22 44 33	23 50	A	0 3? W
2789~~7~~ 6	φ Per	1 37.4	50 11	G10	IIaOB	9	38	00 14 9	00 32	B	1 0?W
2789~~8~~ 7	HD 18884 (α Cet)	2 57.1	+03 42	G10	IIaOB	9	37°F	01 12 12	01 36	B	0 53 W
2789~~9~~ 8	HD 34797	05 14.9	+57 27	A10	IIaOB	short 9	37°F	01 56 20	02 36	B	0 37E
27~~900~~ 899	HD 35410	05 19.4	-00 59	G10	IIaOB	9s	36°F	02 51 40	04 11	B	? ?W
2790~~1~~ 0	HD 44131	06 15.0	-02 54	G10	IIa-Ob	9s	36°F	04 25 45	05:55	B	01 ?W
2790~~2~~ 1 F	Focus Test				Lantern	9L				B	

04:45 l. cloud from S & E

Dome Temp. 42° F

Focus

Dome Temp.

Transparency Conditions Good
OD: Excellent

McRae's Tutorial class. 90 visitors

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp. # 2	REMARKS		Plates	Quality
[illegible]	B	~~E 1 17~~	~~50 30~~	~~00~~	~~3.95~~	~~B op~~	with filter ~~2-2-2~~		[illegible] 5	3852 3855	Plate broke
[illegible]	A	0 32W	58 15	00	7.4	B5	with Filter 5-5-5	B Type Sta Vel	8	3856 3858	~~[illegible]~~ strong
[illegible]	[illegible]	1 07W	50 29	00	3.4	B cp	with filter 2-2-2	(Plate [illegible] – [illegible] weak, [illegible]; good)	7	3861 3865	[illegible]
[illegible]	[illegible]	0 53W	+03 57	0	4.17	M2 III	with filter 5-5-5	EXPMETER WORKING FINE * Bright [illegible] Std Vel.	7	3866 3879	[illegible]
[illegible]	[illegible]	0 27E	+57 30	000	5.25	A0	4-4-4	Hi vel. Int. clouds	7	3879 3886	[illegible]
[illegible]	8	01 04W	-00 57	00	5.9	K0	6-6-6	Std vel.	8	3887 3907	fine
[illegible]	8	01 55W	-02 56	0	6.5	M1	5-5-5	Std Vel	8	3907 3927	[illegible]
							15/1,5	24 7x5/8 IIaO plates left	He apparently forgot to remove the filter		nothing on plate

Exposed plates in darkroom, unexposed in N pier. 2 plates broke in "[illegible]"

(* Exp. [illegible] = calculated value / 10 in calculated [illegible]
Seeing was better, also [illegible] type star.) Re [illegible] capping device
- if open cap very carefully, works OK.

Require small flashlight

29

Date Fri/Sat Oct 30/31 '64 **Observer** (1Fd) B – H ✓ **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
349 – 3125	HD 187923	1950.5	+11 34		7/4/5	28		1824	2x	
349 – 3126	HD 186408	1940.9	+50 25		7/4/5 } 6/5/5 }	28		1852	2x	
27900 F2	Focus test	in in / out out		G10	Bantam	9	07.8°C 46F			B
349 - 3127	HD 217014	22 55.7	+20°35'		6/5/5	28		2108	2x	
349 - 3128	HD 166	00 04.7	+28°50'		6/6/5	28		2128	2x	
349 - 3129	M 31	00 40.5	+41 03		8/4/5	28		2153	2x +5m 5167 – 4767	
349 - 3130	M 32	00 40.5	+40 39		8/4/5	28		2230	2x+ 4767 – 5167	
349 - 3131	HD 10307	01 39.6	+42 26		6/4/5	28		2308	2x	
349 - 3132	Hyad #2	03 15.7	+07 32		7/5/5	28		2332	2x+15m	
349 - 3133	Hyad #15	04 12.3	+23 29		7/5/5	28		0002	2x	
349 - 3134	Hyad # 17	04 12.4	+14 32		7/5/5	28		0020	2x+15m	
349 - 3135	Hyad # 18	04 12.5	+12 21		7/5/5	28		0042	2x	
349 - 3136	Hyad # 23	04 15.9	+18 10		7/5/5	28		0100	2x	
27901	φ Per	01 37.4	+50°11	G10	IIaOb	9L	+41°	0158	0216	B
27902	HD 26162	04 03.3	+17°21	"	"	9S	+41°	0252	0530	B

Dome Temp. 50°F CO₂ 17:45 **Transparency Conditions** OK Altostr. low in N
Focus 700V 1915 Cumulus clouds moving in
Dome Temp. 2300 → Very Fine

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
				4"	6.15	G2 V		SSS	
				4"	5.96	G2 V		SSS	
	B						no filter 15/15	7μ c to mi ; re-set to 3.30 did so. from 3.04	
				5"	5.51	G5V		E SSS	
				4"	6.13	K0 V		SSS	
		0h20m E	use Sunsky	—	—	—		Galaxy	
		025W		—	—	—		"	
				4"	4.94	G? V		SSS	
				4"	7.78			SSS	
				3"	8.09			SSS	
				3"	8.46			1° Fix hook on upper flap covering mirror	
				4"	8.06			2° Need small flashlight	
				5"	7.54			3° Clock out by 1.0 min	
		0256W	+50 31	1-2	3.95	Bcp	x15 5-5-5	Please put copy of 1964 Hand book in dome! #7 4037 4047	strong
	B	0346W	+19 31	0-1?	6.4	K1	x15 5-5-5	STD VEL #8 4048 4066	strong

15 UNEX. PLATES + P.H. "B" IN CUPBOARD N. PIER

Filter for Arc in N.P. also

Plates developed

Date Sat Oct 31 - Nov 1 /64 **Observer** Hd / mt vdB **Julian Day**

Important Note (Hd): Examining recent plates carefully under high power ...
27888 are in poor focus despite repeated focus checks with lantern plates. I will...
the platens of PH's B and C. These would hold the thicker lantern plates...
I retired PH B and readjusted PH C and tested as shown below. The d...
attributable, I think, to their different bending characteristics. Furthermore...

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
27902 F1	Focus Test	in in / out · out		G10	IIaO	9	13.3°C 56			C	
27902 F2	" "		"	"	lantern	9	13.3°C 56			C	
27903	HD 170650	18 25.5	23 48	G10	IIaOB	long 9	49	18 17 34	19 25	C	W 3
27904	φ Per.	1h 37.4	50 11	G10	"	long 9	44	22 34	22 48	C	
350 - 3137	HD10307	01 39.6	+42 26		6/5/5	28		2305	2x		
350 - 3138	Hyad #2	03 15.7	+07°32'		7/5/5	28		2329	2x		
350 - 3139	Hyad #15	04 12.3	+23 29		7/5/5	28		2352	2x		
350 - 3140	Hyad #17	04 13.4	+14 32		7/5/5	28		0009	2x + 5		
350 - 3141	Hyad #18	04 12.5	+12 21		7/5/4	28		0029	2x		
350 - 3142	Hyad #23	04 15.9	+18 10		7/5/4	28		0046	2x		
350 - 3143	Hyad #39	04 20.7	+16 42		7/5/4	28		0104	2x		

Dome Temp. .... CO_2 in 22:30
Focus .... V = 700
Dome Temp. ....

Transparency Conditions: Ejw than cir at low foggy
oooo (much) improved
the best seeing I have ever seen at 200

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality

power, I found that all plates on G10 sense (but not including) . Finally, I traced the trouble to maladjustment of the screws holding plates against the pins, but not the extra-thin IIa O's.
The difference between lantern and IIa O's is now small and I decided that in view of the new distribution of light in the spectrum we should eliminate [the GG18 filter from the comp. since it have all violet lines at red end] c to vi (slightly) in the most important region [of the 15 x filter]

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
C							30/30	Without the GG 18 filter but with	ave v 11 μ c to vi ∴ reset to 370
C							15/15	Pretty good throughout. no filter at all. i.e. They are different	
25		W $3^h 22$	23 53	1	5.72	B5	with X 15 5, 5, 5	Hi Vel intr. counting 1 per 5 min sens 8 4068 4080+	
		E 29^m	50 30	2	3.35	Eq?	5, 10	Special Star " 5 4084 4087	strong
				3"	4.34	G2V	sss		
				2"	7.78	—	sss		
				2"	8.09	—	sss		
				1"	8.46	—	sss		
				1¼"	8.06	—	sss		
				2"	7.54	—	sss		
				2"	7.86	—	sss		

33.

CONT

Date Sat, Oct 31/Nov 1 ... EST / 5 m **Observer** MB - Mt **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle
350 - 3144	Hyad #50	4 22.2	+14 41		7/5/5	28	-	01 22	2x		
350 - 3145	Hyad #58	4 23.8	+18 47		7/5/5	28	-	01 42	2x		
350 - 3146	Hyad #63	4 24.3	+16 46		7/5/5	28		01 58	2x		
27905	√5x HD 29248	4 31.3	-03 33	610	IIa0b	long 9	42°	02:33 [16]	03 04	C	0:0 W
~~27906~~	~~HD 34787~~	~~5 14.9~~	~~+57 27~~	~~"~~	~~"~~	~~"~~	~~42°~~	~~03:25~~	~~04:38~~	C	1:4 W
~~27907~~											

Plate 27906 was found broken in RH !

Dome Temp. 44°

Focus

Dome Temp.

Transparency Conditions 01 04:00 heavy fog. Dome dewing badly. Some high cloud

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
				3"	7.62	–	SSS		
					7.53	–	SSS		
				3"	8.06	—	SSS		
		0:55 W	−03° 26′	1–2	4.12	B2III	3-3-3	Minch Old. Interf. Line sens 6 {4089 4091½	strong
		~~1:43 W~~	~~+57° 31′~~	~~1–0~~	~~5.25~~	~~A0~~	~~5-5-5~~	~~[illegible]~~ sens 7 {4092 4098 ← fragments in box – unnumbered.	

05:00 Clouds. Closed up

P/H loaded

Telescope not well balanced during last few nights. Direction of drift depends on hour angle E or W

Date SUN NOV 1/2 **Observer** Hd / Rc / Mse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27906	HD 17839	$19^H\ 03^m.1$	$+41°\ 16'$	G 10	IIa0 b	9.	55°	18:24 [56]	20:15	C
27907	HD 209008	$21^H\ 55^m.1$	$+06°\ 14'$	G 10	IIa0 b	9.	53°	20:37 [4]	22:45	C

Dome Temp. 55°

Focus

Dome Temp.

Transparency Conditions

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
3:39^w	+1° 23′	2	6.15	B3	5-5-5	~~MÜNCH STD PRGRM~~ Interstellar line prog	8 {4102 4114	(good) fine
3:15^w	+6° 32′	2	5.99	B3 III	5-5-5	" " " " SOME CLOUDINESS	8 {4115 4123	good

- SOLID OVERCAST 22:50^h
- 7 UNEXPOSED PLATES IN DARK ROOM IN N. PIER

34

— MSE

Date Nov. 3-4, 1964 (Tues-Wed.) **Observer** Fl, Mse - Hr **Julian Day** ......

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
27908	HD 178329	19h 03.1m	+41° 16'	G10	IIa0b	9 L	55° 50°	17 54	20 21	C	3h 52 W
27909	HD 10516 φ Pers	1h 37.4m	+50° 11'	G10	IIa0b	9 "	49°	20h 35m	20 46	C	2h 0E
27910	HD 6860 β And	1 04.1	35 05	G10	"	9 "	49°	21h 03m	21h 18m	C	1 14E
27911	HD 20797	03h 16.0m	+64° 14'	G10	"	9 "	49°	21h 38m	23h 38m	C	1h 07E
27912	HD 26965 o² Eri	04h 10.7	-07° 49'	G 10	"	9 "	48°	00h 09m	01 17	C	00 22E
27913	HD 75486	08h 45.2m	62° 20	G 10	"	9 "	47°	01h 43m	02h 57m	C	03h 17 E
27914	HD 78362	09h 02.7m	+63° 55'	"	"	9 "	46°	03h 15m	03h 41m	C	02h 48 E
27915	" 66141	07h 57.1	+02 36	"	"	"	+45°	04 29	05 21	C	00 02E
27915 F	Focus Test	IN-IN/OUT-OUT					07.1°C +45°			C	

Echo I W→E 18:05
" " " 20:05
" " " 22:05

Dome Temp. 55°

Focus

Dome Temp.

Transparency Conditions Good

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
05	C	3h 52m W	+41° 24′	0	6.15	B3	5-5-5	Interstellar Line Program.	Sens 8 {4131 4143	fine
15	C	2h 17m E	+50° 30′	0+	3.95	Bop	5-5-5	special stars for G 10	Sens. 7 {4145 4150	K strong [illegible]
18	C	1h 14E	+30° 25′	0	3.72	M0 III	5-5-5	[used TRACE THE COUNTS] K line Emission Star	Sens 8 {4153 4193	[illegible]
39	C	1h 07E	+64° 28′	0+	6.62 ~5.6	M0 II	5-5-5	K LINE EMISSION STAR	sens. 8 {4194 4224	weak
17	C	00 20E	-07° 43′	0-1	5.26 ~4.5	K0	5-5-5	K LINE EMISSION STAR	sens 8 {4225 4245	[illegible]
2h 57m	C	03h 17m E	62° 07′	0-1	5.72	gF0n	5-5-5	INTERSTELLAR LINE PGM	Sens. 8 {4246 4261	fine
3h 41m	C	02h 48m E	63° 39′	0-1	4.74	F5+A5	5-5-5	INTERSTELLAR LINE PRGM	Sens 7 {4262 4268	fine
5 31	C	00 02E	+02 25	1-2	5.5	K3	5-5-5	STD. VEL.	" 8 4272 4293	fine sl. contrast to red in violet.
							15/15	No Filter		

6 Plates in N. Pier

*Magnitude for β And seems to be incorrect at $m_v = 3.6$ ($m_{v\ RASC\ Hndbk} = 2.0$)!

Date Nov. 6-7, 1964 (Fri-SAT) **Observer** Rc (Mse) - Mt (Mse) **Julian Day**

	Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.E.	Hour Angle End
2	27916	HD 178329	19h 03.1m	+41° 16′	G10	II a.0b	9 L.	47° F 43° F	18h 25m 44s	20h:03m	C	3h 45m
2.	27917	HD 10516 φ Pers	1h 37.4m	50° 11′	G10	II a 0b	9 XL	44°	20h:53 6	21h:05	C	1h.48m E
	27917 F1	focus test	on II a 0	film	in -	in / out -	out	06.7°8 44			C	
	27917 F2	focus test	on II a 0	film	in -	in / out -	out	44°			B	

Dome Temp.

Focus

Dome Temp.

Dome Temp. 50 **Transparency Conditions** GOOD

Focus

Dome Temp.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
h m 0:03	C	3h:45m W	41°22′	0	6.15	B3	5-5-5	INTERSTELLAR LINE PROG. SENS. 8 {4298 4310	strong
[illegible]	C	1h:48m E	50°30′	0	3.95	Bop	5-5-5	Special for G.I.S. Sens 7 {4311 4316	poor guiding
	C						30/30		OK
	B						30/30		"

- 20h10 - CLOUDS - 20h35

- 4 UNEXP. [illegible] in N. PIER

- 6 UNEXP. [illegible] film in N. PIER [illegible]

Mse

Date Nov 7-8 1964 Sat/Sun **Observer** Mse vdB - HS **Julian Day**

	Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
2	27918	HD 206778 ε Peg	21 39.3	+09 25	G10	IIaO Fil	9 L	48°F	18h 26m	18h 44m	C	00h 7 E
2·	351-3147	1699B	19 40.9	+50 25		7/4/15	28		18 53			
	351-3148	1699A	"	"		7/4/15	28		19 13			
	351-3149	HD 217014	22 55.7	+20°35		6/5/15	28		19 34			
	351-3150	HD 166	00 04.7	+28 50		6/6/15	28		19 54			
	351-3151	M31	00 40.5	+41 03		7/5/15	28		20 14	2x +5hy 5200-4700		
	351-3152	M32	00 40.5	+40 39		7/5/5	28		21 02 2x	5200 - 4700		00 30 E
	351-3153	HD 10307	01 39.6	+42 26		6/5/15	28		22 45			
	27919	HD 105... φ Pers	1h 37.6m	50° 11'	G10	IIaO film	9 x L	43°F	23h 02m	23h 20m	C	01h 29 W
	27920	HD 21770 36 Per	03h 25.5m	+45° 43'	G10	IIaO-b	9 L	42°F	23h 45m	01 29	C	
	27921	HD 23230 ν Per	03h 38.4	+42° 16	"	IIaO film	"		01 49	02h 13m	C	01h 11 W
	27922	HD 44478 μ Gem	06h 16.9m	+22° 34'	"	"	"	40°F	02h 46m	03h 06m	C	00h 21 E
	27923	HD 60522 ν Gem	07h 29.5m	+27° 07'	"	"	"	40°F	03h 23m	04h 01m	C	00h 30 E
	27924	HD 54605 δ CMa	07h 04.3m	-26° 14'	"	"	"	39°F	04h 29m	04h 33m	C	00h 20 W
	27925	HD 62044 σ Gem	07 37.0	+29 07	"	"	"	3°	05 10	06 00	C	01 3
	27925F	Focus Test IN-IN/OUT-OUT			"	"	"	"			"	

Dome Temp. 47°F CO2 in 1800 **Transparency Conditions** OK

Focus 2215 thin cl. Low in W

Dome Temp. 2225 clouded out

clouds ~ 0200

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
8h 44m	C	00h 7m E	+9° 42'	1	3.54	K2Ib	7-7-7	K-line Program. Sens 7 {4317 4327	fine.
				8"	6.20	G5V	SSS		
				8"	5.96	G2V	SSS		
				5"	5.51	G5V	SSS	3 IIaOb Plates in N. Pier	
				5"	6.13	K0V	SSS	10 IIaO Films " " "	
		01 15 E		–	Galaxy		SSS	0630–0800 Repair to Dome Pwr. Cable	
		00 30 E		–	Galaxy		SSS		
				7"	G2V		SSS		
	C	00h 29m W	50° 31'	1 2	3.95	B0p	7-7-7	Special For Carlo Sens 7 {4328 4336	lstrong
	C	00 52 W	+45° 57'	1–2	5.6	F4III	5-5-5	F- Star Prog. Sens 8 {4337 4352	strong
13m	C	01h 22m W	+42° 28'	1–2	4.4	F5II	5-5-5	F- Star Prog. out of focus! # 7 4353 4362	guiding lstrong
	C	08h 21m E	+22° 33'	1–2	4.54	M3III	7-7-7	K-LINE # 4 {4363 4373	good. ~~weak~~
	C	00h 39m E	+27° 00'	1–2	5.40	M0III	7-7-7	" (out of focus in centre) 7 {4374 4384	(comp. prob. poor) weak
	C	00h 24m W	-20° 19'	1	2.5	F8Ia	7-7-7	F-STAR 1° keep box of pencils in dome #4 {4385 4388	good. ~~weak~~
		01 13 W	28 59	1	6.26	K1p	7-7-7	K-line 2° Observers handbook #8 4398 ... 61, 4428	useless out of focus
		- EXPOSURES X1.5 ON IIaO FILM.							
							30/30	Focus plate ... - SUPPORT ... ... 27919 SV very bad focus!	... field ...

Date NOV 8-9 / 1964 SUN / MON **Observer** Hd velB RC - MSE **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
27926	HD 170650	18h 25.5m	+23° 48′	G 10	IIa O film	9 L	52°F	~~18:05~~	*1 —	B	
							51°F	18h : 48m 46	20H 20m	B	04h 43m (partial)
27927	HD 210027 ι Peg	22h 02.4m	+24° 51′	G 10	II a O film	9 L	49°F	20H : 33m 16	21H 05m	C	01h 55m (partial)
27928	HD 10516 φ Pers	01H 37.4m	50° 11′	G 10	II a O b	9 x L	48°F	21H 17m 4	21H 25m	B	01h 21 (partial)
27929	HD 18884 α Cet	02H 57.1m	+03° 42′	G 10	II a O film	9 L	48°F	21h 42m 12	22h 06	C	01 [illegible]
352-3154	♃ III	03 20	+17		6/5/5	28			22 23	2x	
352 3155	♃ IV	03 20	+17		6/5/5	28			22 43 sky, 2x		
352-3156	HD 20630	03 17.2	+ 3° 14′		6/5/5	28			23 02		
352-3157	Hyad # 2	03 15.7	+ 7 32		7/5/5	28			23 27		
352-3158	Hyad # 15	04 12.3	+ 23 29		7/5/5	28			23 45		
352-3159	Hyad # 17	04 12.4	+ 14 32		7/6/5	28			0002		
352-3160	Hyad # 18	04 12.5	+ 12 21		7/5/5	28			00 22		
352-3161	Hyad # 23	04 15.5	+ 18 10		7/5/5	28			00 40		
352-3162	Hyad # 39	04 20.7	+ 16 42		7/5/5	28			01 02		
352-3163	Hyad # 50	04 22.1	+ 14 41		7/5/5	28			01 22		
352-3164	Hyad # 58	04 23.8	+ 18 47		7/5/5	28			01 40		

Dome Temp. 5 3°

Focus

Dome Temp.

CO_2 in 22:10

Transparency Conditions sky ok, slight ground fogs. Also thin foggy patches in sky? —

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
[illegible]	3		23° 51′	1	5.72	B5	5	INTERSTELLAR LINE PROG.	{4433	
[illegible]	8	04ʰ 43ᵐ W	″				5-5-5	*2 #8 (18)	{4436 4448	Good.
[illegible]	C	01ʰ 55ᵐ W	+25° 12′	1	4.4	F5 V	5-5-5	F-STAR PROG. #6 (8)	{4450 4458	strong
[illegible]	8	01ʰ 21ᵐ E	50° 31′	1	3.95	B0p	5-5-5	SPECIAL FOR [illegible] #7 (5)	{4459 4464	very poor guiding
[illegible]	C	01ʰ 56ᵐ E	3° 56′	1	4.17	M2 III	5-5-5	K-LINE very poor focus #6 (10)	{4465 4475	weak
1:23					6	G2 V	SSS			
2:53					6	G2 V	SSS			
3:02				6″	4.83	G5 V	SSS			
3:12				3″	7.78	—	SSS			
[illegible]				3″	8.09	—	SSS			
[illegible]				4″	8.46	—	SSS			
[illegible]				3″	8.06	—	SSS			
[illegible]				4″	7.54	—	SSS			
[illegible]				3″	7.80	—	SSS	Strange cloud??		
22				3″	7.62	—	SSS			
40				3″	7.53	—	SSS	*2 LIMIT H.A. WEST		
								*1 - FOCUS PLATE BROKEN		

(Continued)

Date Nov 8-9, Sun-Mon 1964 **Observer** Cw **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle
	02:15 focus plate found broken in pl.										
27930	HD 412239	05 52.5	+45 56	C 10	[illegible]	9L	45°F	02:35	03:55 [45]	C	0 [illegible]
27930 E.	[illegible]	[illegible]			[illegible]					[illegible]	

broke while in spectrograph - luckily, tape held pieces in.
- need more focus plates.

Dome Temp. 45°F

Focus ....

Dome Temp. ....

03:20 thin cloud or fog (?)
heavy dew on dome

Transparency Conditions Good (foggy)

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	[illegible]	0 54 W	46° 57′	1-0	5.94	M3 II	5-5-5 30/30	K-line 7 450/ [illegible]	weak ~~poor guiding~~

04:00 closed up because of fog & dew

Date NOV 12-13 THURS-FRI / **Observer** JAB MSE - Hb **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
27930 F₂	focus test	in	in/out	out	I a O film		61°F	———	———	C	
27931	HD 1013 χ Peg	00h 09.4m	+19° 39′	G 10	II a O film	9L	59°F 57°F	20h 56m 19	23h 30m	C	02h 34m W
27932	HD 10516 φ Pers	01h 37.4m	50° 11′	G 10	II a O film	9XL	57°F	23h 46m 8	00h 02m	B	01h 32m W
27933	HD 31398 ι Aur	04h 50.5m	+33° 00	"	"	9L	56°F	00h 17m 13	00 42	B	01 00 E
~~--~~	~~HD 20902 α Per~~	~~03h 21.7m~~	~~+49° 44~~	"	"	9L	~~59°F~~	~~TOO WINDY TO GUIDE~~		~~B~~	
27934	HD 29139 α TAUR	04h 30.2m	+16° 19′	"	"	9L	57°F	01h 04m 3	01h 09m	C	01h 12m E
27935	HD 39801 α Ori	05h 49.8m	+07° 23′	"	"	9L	56°F	01h 26m 6	01h 37m	B	01h 09 E
27936	HD 48329 ε Gem	06h 37.8m	+25° 14	"	"	"	55°F	02h 27m 20	03h 07	B	00 32 E

——— 0330 Closed up ———

27936 F₂	FOCUS TEST	NOV 13 in	in/out	out			45°F			C	

Dome Temp. 60° F
Focus
Dome Temp.

Transparency Conditions Fair, Clearing after showers
Windy. Warm air mass
VERY GOOD AFTER 2300h

0110 heavy Ac from west.
0300 THICK Ac

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
	C						30/30		badly out of focus	unable to correct
	C	02h 34m W	+20° 03′	0+	6.29	M2 III	5-5-5	K - LINE #1 image jumpy	8 {4548 4558	out of focus. weak
	B	01h 32m W	50° 31′	0+	3.95	B0p	5-5-5	SPECIAL FOR G10	# 7 {4559 4564	comp. & weak guiding
	B	01 00 E	33° 07′	1	3.97	K3 II	5-5-5	K- EMISSION PROG.	# 6 {4565 4575	guiding fine?
	B				2.3	F5 Ib		~~F STAR PROG.~~ too windy in west.		
	C	00h 12m E	+16° 28′	1	2.24	K5 III	5-5-5	K - LINE	# 4 {4575 4579	out of focus guiding ...
	B	01h 09m E	07° 25′	0	2.27	M2 Iab	5-5-5	INCREASING CLOUD K-EMISSION PROG.	# 4 {4579 4583	
	B	00 22 E	+25° 11′	0	3.96	G8 Ib	5-5-	FREQUENTLY INTERRUPTED BY CLOUDS K-EMISSION PROG.	# 5 {4586 4596	out of focus very poor guiding

Unexposed IIaO film in north reel
7 Exposed IIaO film strips in darkroom
2 unloaded pH (B9C) in north reel
(Is the magnitude for α Tau incorrect in the standard velocity programme? — Hb)

| | C | | | | | | 30/30 | * 1 - [illegible] | al comp. focused in C0 ... |

Date Nov 14/15 Sat–Sun **Observer** Mt – Rc **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
27937	λ And HD 222107	23h 32.7m	+45° 55′	G 10	IIa0 film	9 L	50°	18:45	31 19:46	C	0 30 E
27938	56 Peg. HD 218356	23 02.2	+24 56	"	"	9 L	46°	20:07	56 23:18	C	3 33 W
27939	φ Persei HD 10516	1h 37.4m	+50° 11	"	"	"	43°	23:40	22 00:24	C	2h 04 W
27940	μ Per. HD 26630	04h 7.6m	+48° 9′	G 10	IIa0 film	9 L	42°	01:07	36 02:19	C	1h 27 W
~~27941~~	~~π Aur HD 40239~~	~~5h [illegible]~~	~~[illegible]~~	~~G 10~~	~~IIa0 film~~	~~9 L~~	~~42°~~	~~02:46~~	~~7 03:[illegible]~~	~~C~~	[illegible]
27940 T	Flexure test			G10	IIa0 film	9	44	full aperture		C	

Dome Temp.

Focus

Dome Temp.

Dome Temp. 50°F

Focus ....

Dome Temp. ....

Transparency Conditions Good

23:00 some light cloud about

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	C	0ʰ:30ᵐ E	+46° 17′	0+	5.00	G 7	5-5-5	K-line pgm (seemed to go very fast) sens 8 { 4607 4647	fine
[illegible]	C	3ʰ:33ᵐ W	+25 18	0	5.98	cK0	5-5-5	" sens 8 { 4648 4680	weak
[illegible]	C	2ʰ:04 W	50° 32′	0	3.95	B0p	5-5-5	Special for G10 (Found focus plate ground side [illegible] film) sens 6 { 4682 4687	out of focus, [illegible]
[illegible]	[illegible]	1ʰ 27 W	48° 18′	0	4.84	G0I₀	5-5-5	K-line pgm Sens 7 { 4688 4702	fine
~~[illegible]~~	~~C~~	~~2ʰ 22 W~~	~~45° 55′~~	~~0+~~	~~5.74~~	~~M3II~~	~~5~~	Cancelled by cloud Sens 8 { 4703 4705	[illegible]
[illegible]	[illegible]	Outside – HA 3ʰ E Dec 42 Inside – HA 3ʰ W " "					20/20		

Some cloud 00:45

Heavy dew, complete condensation at 2½–3

51

Date Nov 16/17 **Observer** R— Mt / Mse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle
27941	HD 10516 φ Persei	$1^h 37^m.4$	$+50° 11'$	G10	[illegible]	9×L	42°F	$22^h 26^m$	$22^h 30^m$	C	00 20 W
27942	HD 40239	$5^h 52^m.5$	$+45° 56'$	"	"	"	41°F	$00^h 50^m$	03:05	C	0 55 W

Dome Temp. 42°F

Focus ....

Dome Temp. ....

Transparency Conditions Fair - heavy patchy cloud at 2220
cloud out at 2230

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	C	00 20 W	.	0	3.95	Bop	5 -	~~Discouraging~~ #7 {4708 4709	weak
03 55	C	0:55 W	+45° 58′	0	5.94	M3 II	5-5-5	K-line (PLATE BROKEN) #8 {4712 4752	very weak. out of focus

IN N PIER: 2 [illegible] (3?c).
1 focus plates
2 [illegible]
1 Bal exposed - #77941

Clouds 3:15
2 focus plates in N pier.

Date 17-18 NOV / 1964 **Observer** RC - Hv **Julian Day**
TUES WED MSE

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
27943	HD 178329	19H 03.1M	41° 16'	G 10	IIaO Film	9L	43°F	17h 56m	18H 38M	C	
	HD 10516 φ PERS	01H 37.4m	50° 11'	G 10	IIaO Film	9xL	40°			C	500 w
27944 3	HD 19275	03H 01.1M	74° 01'	G 10	IIaO Film	9L	40°	23h 09 14	23h 47	C	0h 15 W
~~27~~											
27943 F.	focus test in in/out out			G 10	IIaO film	9	26F (32 26 6 30 33)	22 NOV		C	

Dome Temp. 43 °F

Focus ....

Dome Temp. ....

Transparency Conditions
- clouds ~ 18:20
- " 23:45

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	C	~~2 H 55 m W~~	~~+41° 23′~~	~~0~~	~~6.15~~	~~B3~~	~~5~~	clouded out ~~INTERSTELLAR LINE PROG.~~ 20 #8 {4757 4759	too weak
	C	TOO WINDY TO	HOLD	STEADY FINDER.			1	SPECIAL FOR [illegible] #7 {4761	
[illegible]	C	0h 10m W	74° 16′	0	4.89	A2	5-5½	INTERSTELLAR LINE PROG. #7 {4762 4770	fine
	C	Focus setting		3.70 (as before)			15-15	Test is weak, but focus is excellent. maybe this means there is very little temp. effect in focus (same focus as at T = 56 F on Oct 31-Nov 1)	

Date Nov 24/25, Tues-Wed 1964 **Observer** Cn [above: Mc] -H- **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
27944	HD 209008	21H 55.1m	+06° 14'	G40	IIaO-[illegible]	13L	39°F	17H 52m	5 18H 02m	B
27945	HD 218393	23H 02.6m	49° 40'	G40	IIaO "	13L	37°F	18 23	7 18 37	B
27946	HD 223501	23H 15.0m	61° 39'	G40	IIaOb	13L	36°F	18 45	15 19 15	A
27947	HD 24560	03H 49.3m	44° 38'	G40	IIaOb	13L	35°F	23H 52m	15 00H 22m	A
27948	HD 26420	04H 05.7	41° 52'	G40	IIaOb	13L	34°F	00H 34m	13 01H 00m	A
27949	HD 37775	05H 31.0m	-05° 41'	G40	IIaOb	13L	34°F	01H 32m	23 02H 18m	A
27950	HD 50209	06H 47.1m	-00 10'	G40	IIaOb	13L	34°F	02H 30m	23 03H 16m	B
27951	HD 65079	07H 51.9m	+03° 14'	G40	IIaOb	13L	34°F	03H 28m	24 04H 16m	A
27951 T	Fluorine Test			G10	IIaO film	9	44F	full aperture		C

Dome Temp.
Focus
Dome Temp.

Hour Angle End
00 02 W
[illegible]
E 0 15
00 [illegible] W
00 [illegible] W
00 43 W
00 [illegible] W
00 22 W
[illegible]

Dome Temp. 40°

Focus

Dome Temp.

Transparency Conditions Poor - l. cloud, haze
after 2330 transparency good.
0300 - FOG & THIN CLOUDS.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 02 W	+06° 33′	0	5.99	B3III	5-5-5	EXP meter not working INTERSTELLAR LINE PROG. #10 {4784 4786	[illegible] fine
00 30 E	50° 21′	0	6.8	A4e	5-5-5	Be PROG. Exp. meter prob. not working. (but it went out of balance) #10 { 1 count	good.
E 0 35m	62° 03	0+	8.2	B3e	5-15	" " Exp. mtr. working # 9 { 4789 4293	[illegible]
						Sky very poor for all 3. probably about 3 real [illegible]	
00H 27m W	44° 50′	0+	7.8	B3ne	7-7-7	Be Prog. #10 {4795 4796 / No.	fine (fine)
00H 49m W	42° 02′	1	7.6	B3ned	7-7-7	" " -700V #10 {4797 4797	
00H 43m W	-05° 40′	1	8.2	B5ne	7-7-7	" " ~~[illegible]~~ {	strong
00H 25m W	-00° 14′	1	8.3	B5ne	7-7-7	" "	fine
00H 22m W	+03° 05′	[illegible]	7.7	B3ne	7-7-7	" " #9 -900V 4807	[illegible]
outside HA = 3h E dec 42					20/20		[illegible]
inside " 3h W 42							

PH B LOADED - IN N. PIER.

Date NOV 29/30 / 1964 Observer Hd - Hr Julian Day
SUN - MON Mse Mse

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
~~27951 F.~~	~~focus test - in in/out out~~			~~G40~~	~~IIa0 b~~	~~13~~	~~26°F~~	~~$17^{H}\ 32^{m}$~~		B	
~~27952~~	~~HD 184467~~	~~$19^{H}\ 29^{m}.5$~~	~~$58^{\circ}\ 24'$~~	~~G40~~	~~IIa0 b~~	~~13~~	~~24~~	~~17 32~~	~~18 02~~	B	~~W 2 48~~
27952	HD 220116	$23^{H}\ 16^{m}.1$	$57^{\circ}\ 43'$	G40	IIa0 b	13	24°F	$18^{H}\ 55^{M}$ 50	20 35	A	W 1 34
27952 F	Focus test	in-in/out-out		G40	IIa0 B	13	21	~~20~~		B	
27953	HD 2789	0 26.3	66 36	G40	"	"	21	20 58 45	22 28	A	W 2
27953 F	Focus test	in-in/out out		G40	"	"		~~22 53~~		B	
27954	BD +54° 398	1 45.8	54 51	"	"	"	21°F	22 53 40	$00^{H}\ 13^{M}$	A	02 42 W
27955	HD 36665	$5^{H}\ 28^{m}.3$	+27 59'	G40	"	"		00 29 23	01 15	B	00 c/W

Dome Temp.
Focus
Dome Temp.

Dome Temp. .... 0045 Clouds
0010 More Clouds

Transparency Conditions good

Focus ....

Dome Temp. ....

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	B						20/20	Forgot to ~~fasten~~ decapper ~~in changing~~ to G40 # {4920	
~~18 02~~	A	~~W 2h 48m~~	~~58° 32'~~	~~0~~	~~7.5~~	~~K5~~	~~7-7-7~~	Std vel. FIELD DRAWN counter prob. not working well # 9 {4920 4921½	
20 35	A	W 1h 34	58° 06'	0	9.28	B05 Ipe	7-7-7	CN Be PROG not really working ? 9 {4924 24.6 *	comp v ink [illegible] Two [illegible]
	B						20/20	~~9~~	
21 25	A	W 2 15	66 59	0	8.61	B2e	7-12-10	Cm Be Prog. opened up [illegible] arc 9 4925	so set down [illegible] time
	B						30/30		[illegible]
[illegible]	A	02 42 W	~~X~~	0	8.44	B0pe	7-7-7	" " "	[illegible]
[illegible]	B	00:01 W	55° 09	1	8.40	B/e (III-V)	7-14	" " " #9 {4928	[illegible]

- MOVED FOCUS [illegible] [illegible] 27454 1e

* [illegible] TOP [illegible]

- THE [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] CAUSED CAN THE [illegible] BE REPOSITIONED?
- PLATE [illegible] [illegible] [illegible] [illegible] BOX [illegible] TOP [illegible] [illegible]

59

Date 30 - 31 NOV / 64 MON - TUES **Observer** - Mt Mse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
353T-1	σ Cyg	21h 16.1	+39° 16′		I = 30s			06h 45m			1h 32m W
2	"	"	"		I = 10			19 50			2h 56m W
3	ι And	23 35.4	+43 06		I = 10						0 55 W
4	#2	00 15.2	+38 20		I = 10			20 13			
5	#7	00 37.5	+21° 03		I = 10			20 30			0 35 W
6	#10	00 47.8	+40 53		I = 10			21 13			0 41 W
7	#31	02 33.9	+06° 41		I = 3			22 35			
27956	HD 29587	04h 34.5m	41° 57′	640 Ia0	13		13°F	23h 42m 30	00h 42m	A	00h [illegible]
~~27957~~	~~BD 37° 1292~~	~~5 35.9~~	~~+37 56~~	"	"	"	12°F	~~01h 07m 60~~	~~03 07~~	B	01 53 W
27958 7	HD 58599	07h 21.2m	+11° 12′	"	"	"	10°F	03 20	10 03 40	A	[illegible]
27959 8	HD 55439	07 07.8	-09 40	"	"	"	10°F	03h 53′ 44	05 20	B	05 35 W
27960 59	HD 74604	05 37.5	+67 05	"	"	"	"	05 42	6 05 54	A	[illegible] W
27961 0	HD 38387	07 26.2	+74 47	"	"	"	9°F	06:15	6 06:37	B	[illegible]
27961 9 F	Focus Test			in - in / out out						A	

Finder & Visitors Eyepiece are out of line. Star on [illegible]
About half the plates were too small to fit prop[erly] [illegible]

Dome Temp. ....

Transparency Conditions Fine

Focus ....

Dome Temp. 12°F

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		1h 52m W			4.3	B9 Iab			
		2h 56m W							
		0 55 W			4.3	B8			
					4.6	A2V			
		0 35 W			5.8	K0 II			
		04 5 W			4.5	B5 V			
					5.8	dK4			
00h 42m	A	00h 26m W	42° 05'	0	7.7	G2	7.7.7	STD VEL. #9 {4938, 4942½	strong
[illegible]	B	01h 52m W	38° 00'	0	9.28	B3 IV:pe	7-7-7	~~[illegible]~~ Cn Be Pgm: Exp. meter not working #10 {4943 *①	Not uncapped nothing
[illegible]	A	00 35 W	+11 06	0	6.26	B8	7-7-7	B8-B9 Pgm #9 {4944, slow 4945	strong
[illegible]	C	02 35 W	-09 44	0	8.58	B3e [III-V]	7-7-7	Cn Be Pang #10 {4946, 4951	A.W.A.
[illegible]	[illegible]	01 32 W	+63 53	0	6.10	B8	7-7-7	B8-B9 #10 {4953, 4954	strong
[illegible]	[illegible]	01 19 W		0	6.35	B9	7-7-7	" #10 {4954, 4956	strong
							30/30		Cts. violet

finder centre about halfway from centre of eyepiece
in Exposed Plate box.

ST. ... DOES NOT COM... EVEN THO BA...

Date Dec 1-2, 1964 **Observer** Fl, Mse – **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
[illegible]	HD 216629	22 49.4	+61 36	G40	IIa0 6	13	18°			
~~27960F2~~	~~Focus Test~~	~~In-In, Out-Out.~~								
			Focus was set to		56	FROM	57			
Dec 2, 1964										
27960F3 [2]	Focus Test	In-In, Out-Out					Focus: 56		13	F
F4 [3]	″		″	″		Reset	Focus: 56		SLIT 13	A
F5 [4]	″		″	″			Focus 54		13	B
F6 [5]	″		″		"Control"		Focus 54		13	A
F7 [6]	″		″	″		Focus 54	Tilt changed		1/12 turn 13	B
F8 [7]	″		″	"Control"		Focus 54			13	A
F9 [8]	″		″			Focus 53.5			13	B
F10 [9]	″		″			Focus 53.5			13	A
F11 [10]	″		″			Focus 52			13	F
F12 [11]	″		″			52			13	F

Dome Temp. ....
Focus ....
Dome Temp. ....

Transparency Conditions Good
Some cloud at beginning.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			10.0	B2pe		Cn Be Prog.	
						Cirrus Clouds appeared	
						Note: Cn Be Prog Star #36	
						Cannot be found in sky!	
						~~18:45~~	
					30/30		[illegible]
					35/35	Developed [illegible]	[illegible]
					"		[illegible]
					"		better focus than F5!
Between F7 & F8 the telescope was moved in dec + R.A. Did this affect Focus???					"	Tilt changed N screw out 1/2 turn	[illegible]
						S " in " " turn	tilt OK
					45/45		[illegible]
					"		[illegible]!
					45/45	Same as F 9	[illegible]
					"	BEST	very good!
Two hours		~~lost~~			"		not quite as good.

Date .... **Observer** .... **Julian Day** ....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
Dec 2 continued					(Cu)					
FL3[12]	Focus Test		2-2	/ [illegible]	Alert	13	27°F	Focus: 52		1
FL4[13]	"		"		"	13	27°F	Focus: 52		3
Dec 3	Hd adjusted Ironame carefully, but d[illegible]									
27960 T1	Full ap.	comp test		G40	IIaO B	13	29			A
T2	—	—	—	—	—	—	—			B
T3	—	—	—	—	—	—	—			A
27960 T4				G40	"	13				B
T5										A
T6										A
T7										B

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions ....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2		Telescope 4 hrs West					45/45	Focus OK	little weak
2		Telescope on meridian					45/45	"	"
but the		not touch focus							
	A						30		Focus seems OK
	B	(may be fogged by incomplete capping					15		
	A						15		
	B						30		
	A	fogged by incomplete capping					60	— best exposure.	
	A						15'		
	B						30		

Date DEC 6-7/1964 SUN - MON **Observer** Ad - Hr Mse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27960 T8	Sky	G		G40	IIa0B	full length 13	22F			A
T9	Sky			G40	"	13	22F			B
T10	Full aperture Comp			"	"	13 long	22			A
T11	" "			"	"	"	22			B
27961	HD 212943	22 22.8	+4 12	"	"	"	19	17 55 7	18 09	A
27962	HD 220116	23 16.1	+57 43	"	"	"	17	18 23	20 23	B
27963	φ Pers HD 10516	01 37.4	50 11	G10	IIa0	9	15°	20 47 9	21 05	C
27963 F	Focus test in infocus out			G10	IIa0	9				C
27963 T	Flexure Test		50° 11'	G10	IIa0	9				C
27964	BD+54 398	1 45.8	54 51	G40	IIa0B	13	13F	21 42 25	22 32	A
27965	HD 14422	2 14.7	56 56	"	"	"	10	22 50 46	00 22	B
F1	Focus test	(Mon	Dec 7)	G40	IIa0B	13	21°F			A
F2	Focus test			G10	IIa0	9	[illegible]			
T3	Flexure test			G10	IIa0	9	[illegible]			B
T4				G10	IIa0	9	21°F			C
T5										E

Dome Temp. ....

Transparency Conditions ...Good...

Focus ....

0001 Clouds

Dome Temp. ....

Ending Time E.S.T.		Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		16·30 EST – clear sky					2 sec		} OK
			"		"		6 "		
							15 s	These tests made after straightening the film "filter" which was curled up in the tube	OK
							30 s.		strong
18 09	H	27^m	+4 31	1	5.9	KO	5-5-5	Std vel 900 volts lens 7 4966 4968	strong
20 23		1^{h}49^m	58 05	1	9.28	B0.5 Ipe	5-5-5	CN Be prog. not counting – beyond limit lens 10 4968 *1	
35		0 10^m	50 32	1-2	3.95	B0p	8-8-8	SPECIAL FOR G10	fine
							40/40		
		3^{h}W = ~~outside~~ inside ; 3^{h}E = outside					25/25.		
21 32		W 1^{h}27^m	55 12	1	8.44	B0pe	5-5-5	Cn - Be Prog.	fine
22 22	B	2 55 W	57 15	1	9.58	B1pe	5-5	clouds! Cn - Be Prog.	weak
							20/20		O.K.
		Changed focus from					7 to	12 ie the scale reads 2	OK
		Meridian = outside; 3^h E = inside					30/30		violet centre to
		Meridian = outside; 3^h W = inside						4/5 PH A loaded in n. pier	O.K.

*1 – NOT RELIABLE

Date .... **Observer** .... **Julian Day** ....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
75	Flexure	Test	35° 20′	G-10	IIaO	9	26°F			C
76	Flexure	Test	35° 20′	G10	IIaO	9	26°F			D
7765 F3	Focus Test	in-in/out-out		G40	IIaO un	13	26?			A

Dome Temp. ....

Transparency Conditions ....

Focus ....

Dome Temp. ....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			Outside =	0 hr			20/20		
			Inside =	1 hr	E				O.K.
			Outside =	0 hr			20/20		
			Inside =	2 hr	E				sl centr. to violet
							50/50		C to R.

69

Date 8-9 DEC/64 **Observer** CN – MSE **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
27966	35 Aqr HD 210191	$22^h\ 03^m.5$	$-19°\ 01'$	G10	IIaO b	9	29°F	$18^h\ 33^m.5$	19 03	C
27967	HD 220116	$23^h\ 16^m.1$	57° 43′	G40	"	13	26°F	$19^h\ 17^m.7$	20 50	A
27967F	Focus Test	[illegible]	[illegible]	G40	"	13	24°F			[illegible]
		Dec 9 '64								
27967T1	Flexure Test		35°	G40	IIaO	13	26°F			A
T2	Flexure Test		35°	G40	IIaO	13	26°F			B
T3	" "		"	"	"	"	"			A
T4	" "		"	"	"	"	"			B

Dome Temp.

Focus

Dome Temp.

Hour Angle End
01 40W
[illegible]
21 45

Dome Temp. 29°F

Focus

Dome Temp.

Transparency Conditions good

19ʰ 30ᵐ - intermittent cloud.
20 45 - light cloud from NW

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
H 55	01 50W	-18° 40'	0	5.74	B2 V	5-5-5	INTERSTELLAR LINE PROG.	weak.
20 5[illegible]	~~02 53~~ ↓ 21 19 EST)	58° 06' ~~6 [illegible] 53~~ *	1	7.28	B0.5 V	5-5- 25/25	Cm. - Be PROG. CLOUDS 20ʰ 50ᵐ – (light cloud) ~~10~~ 5155 Focus 52	good. sl. centre to end

Closed up 21ʰ 30ᵐ

* exposure stopped at 20 50 by clouds.
capped at 21 19.

A	Inside 3ʰ E / Outside - Meridian	15/15	fine.
3	Inside 3ʰ W	15/15	out of focus.
A	outside - meridian / inside - 3ʰ E	30/30	fine:
B	outside - meridian / inside - 3ʰ W	30/30	center [illegible] toward [illegible].

71

Date 9-10 DEC/64 WED-THURS **Observer** L Mse - RC **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
27968	BD +50° 360	01^H 42.2^m	50° 37′	G40	IIaO	13	27°F	20 47	2249	A	200W
27968 F,	~~focus test~~	in - in	/ out - out	~~8~~ G40	"	"	26°F			~~B~~	
27969	HD 65583	07^H 54.3^m	+29° 31′	G40	"	"	24°F	01^H 39^m 42	02^h 51^m	B	[illegible]

Dome Temp. 27 °F

Focus

Dome Temp.

Transparency Conditions FAIR - GOOD

Clouds at sunset then clearing

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2 00W	50 57	0	9.5	B3ne	5-5-5	Cn - Be PROG. clouds	very weak
					10/10	— this should have been at least 30/30 at centre	[illegible]
0h 08m E	+29° 20'	0-1	7.9	G7	5-5-5	STD VEL. STARS #10 {5186 5201	fine
						clouds from 02 45	

PH B ([illegible]) [illegible]

* EXP. MTR. BALA. VERY GOOD [illegible] [illegible]

Date 13-14 DEC/64 SUN - MON **Observer** Hd - Hr Myse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27970	HD 10516 φ PERS	01h 37.4m	50° 11'	G10	IIaO b	extra 9-long	35°F	20h 20m	20 42	C
27970 F	Form Test	[illegible]		G10	"					C
27971	HD 11291	01h 45.8m	50° 18'	G40	"	13	34°F	21h 04	21 11	A
27972	HD 11905	01h 51.9	41° 12'	G40	"	13	32°F	21h 25m	21 41	B
27973	HD 19698	03h 5.2m	+11° 30'	"	"	13	"	21h 49m	21 57	A
27974	HD 21933	03h 27.1m	+9° 02'	"	"	"	"	22h 01m	22 07	B
27975	HD 23258	03h 38.6m	+20° 37'	"	"	"	"	22h 13m	22 21	A
27976	HD 24769	03h 51.2m	+22° 54'	"	"	"	31°F	22h 24m	22 30	A
27977	HD 25175	03h 54.9m	+17° 00	"	"	"	"	22h 35m	22 43	B
27978	HD 26676	04h 08.1m	+09° 58'	"	"	"	"	22h 48m	22 56	A
27979	HD 27563	04h 15.9m	-07° 50'	"	"	"	30°F	23h 02m	23h 12m	B
27980	HD 27742	04h 17.6m	+20° 45'	"	"	"	"	23h 18m	23 26	A
27981	HD 28217	04h 22.0m	+10° 59'	"	"	"	"	23h 32m	23h 40m	B
27982	HD 28843	04h 27.6m	-03° 25'	"	"	"	"	23h 45m	23 53	A
27983	HD 29587	04h 34.5m	41° 57'	"	"	"	"	00h 00m	00 44	B

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. 35°F

Transparency Conditions clearing after 20H 00

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W 14m	50° 31'	1	3.95	B0p	5-5-5	SPECIAL FOR G.O. [illegible]	fine
					30/30		O.K.
00 35 W	50° 38'	1	5.62	B9	5-5-5	B8 - B9 PROG. #9 {~~5231~~	fine
01H 00W	41° 33'	1	6.56	B9	5-5-5	" winding rotten of (×1) slit & time #9 {5233 39	fine
W 02m	+11° 45'	1	5.89	B9	5-5-5	" #9 {5239 5242	fine
00H 10m E	+09° 16'	1	5.59	B8	8-8	" ~~#9~~ {~~52..~~	fine
E 08m	+20° 46'	1	6.01	B9	8-8	" #9 {5243 5246½	fine
00H 10m E	+23° 07'	1	5.96	B9	8-8	" #9 {5246 5249	fine
00H 01m E	+17° 13'	1	6.28	B9	8-8	" #9 {5250 5253½	fine
00H 01m E	+10° 08'	1	6.20	B8	8-8	" #9 {5254 5257½	fine
00H 57m W	-07° 37'	1	5.67	B8	8-8	" [illegible] #9 {52~~..~~60 5263	fine
W 19m	+20° 57'	0-1	5.87	B8	8-8	" #9 {5263 5267	fine
00H 29m W	+11° 09'	0	5.79	B8	8-8	" #9 {5268 5271½	fine
00H 36m W	-03° 15'	0	5.89	B9	8-8	" #9 {5272 5275½	fine
0119 W	42° 04'	0	7.7	G2	5-5-5	Std Vel #00 {5278 5287	fine
	[OVER]					[illegible]	

Date DEC. 13-14/64 CONT'D. **Observer** — MSE — HV **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
27984	HD 37752	5 35.8	23 16	G40	IIaOb	13	+29	0110	5 0120	A	[illegible]
27985	" 42035	06h 03.6m	+08° 41'	"	"	"	29°F	01h 30m	7 0144	F	[illegible]
27986	" 42784	06h 07.6m	+18° 43'	"	"	"	28°F	01h 50m	9 0208	A	01 11 W
27987	" 43526	06h 11.6m	+7° 6'	"	"	"	"	02h 24m	11 0246	B	01 46 W
27988	" 66684	07h 59.6m	+27° 49'	"	"	4	"	02h 53m	9 0311.5	A	[illegible]
27989	" 68099	08h 05.9m	+10° 07'	"	"	"	"	0319	6 0331	B	[illegible]
27990	" 75486	08h 45.2m	62° 20'	G10	"	9	~~20°F~~	04h 54m	53 0640	C	03 25 W

Dome Temp.

Focus

Dome Temp.

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions Good

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
[illegible]	[illegible]	0055W	+23 19	0	6.47	B9	15	B8-B9	#9 {5287 5290.5	fine
[illegible]	[illegible]	0051 W	+08° 42'	0	6.43	B9	15	"	#9 {5291 5294.5	fine
[illegible]	[illegible]	0111 W	+18° 43'	0	6.16	B8	7-8	"	#9 {5296 5300.7	l strong
[illegible]	[illegible]	0146W	+07 05	0	6.36	B8	5-5-5	" 1964 RA ~ 6ʰ 15ᵐ.0	#9 {5302 5305.5	fine
[illegible]	[illegible]	00 24 W	27° 40'	00	6.14	B9	5-5-5	"	#9 {5306 5309.5	fine
[illegible]	[illegible]	0038 W	+9° 57'	00	6.05	B9	5-5-5	"	#9 {5310 5313.5	l strong
[illegible]	[illegible]	0305W	62° 07'	00	5.72	gF0m	5 5.5	INTERSTELLAR LINE PROG.	#9 {5315 5352	guiding?

Date 14-15 DEC/64 MON-TUES **Observer** MR Rr MSe – RC **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
~~27991~~	~~HD 10516 φ PERS~~	~~01 37.4~~	~~50° 11'~~	~~G10~~	~~IIa0b~~	~~9xL~~	~~26°F~~	~~17 52~~	~~18 08~~	C
27991	HD 11443 α TRI	01 47.4	+29 06	"	"	9L	25°F	18h 33m 13	18h 59m	C
27992	HD 10516 φ Per	01h 37m 4	+50° 11'	"	"	9xL	"	19h 16m 8	19h 32	C
27993	HD 2?952 α Per	03h 17m 2	+49° 30'	"	"	9L	24	19h 53m 3	19h 59m	C
	HD ~~20630~~	~~03h 14.1~~		~~G10~~						
27993 F,	focus test	in in / out	G10 f out	"		9c	23°F	–	/	C
27994	HD 20630 κ Cet	03h 14m 1	03° 00	"	"	11L	23	20h 25 60	22 25	C
2~~7995~~				G40		13				
~~27995~~	~~HD 30?85~~	~~04h 3?~~	~~+70° 45'~~	~~G40~~	~~"~~	~~13~~	~~22°F~~	~~23 06~~	~~23 14~~	~~A~~
27996	HD 32781	05h 00.5	+76 21	"	"	"	~~23 44~~			B
27995	HD 30085	04 39.4m	70° 45'	"	"	"	22°F	23 21 3	23 27	B
27996	HD 32781	05 00.5	76 21	"	"	"	21	23 38 7	23 51	A
27997	HD 34880	05 15.5	-05 28	"	"	"	19°F	00 13 7	00 27	B
27998	HD 43362	06 10.7	-9 00	"	"	"	19°F	00 39 6	00:51	A

Dome Temp. 26 °F

Focus

Dome Temp.

Transparency Conditions fair moon past ¼ some clouds

dec clamp sticking badly at 2300 EST, 2330

Hour Angle End	Declination		Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
~~[illegible]~~				~~3.95~~	~~B of~~	~~5-5-5~~	~~SPECIAL FOR GIO~~ PLATE BROKE DURING EXP., WAS DEFINITELY UNDER PINS	
1h 30m E	29	26	0	4.0	F6 IV	5-5-5	F-STAR PROG	Flexure? fine
0h 40 E	50	11	0	3.95	B of	5-5-5	SPECIAL FOR GIO	weak
2h 03 E	49°	30'	0	2.3	F5 IV	8-8	F star prog.	l strong
						30/30		[sl anthe]
00 45 W	+03	15	0	5.74	G5 V	5-5-5	R [illegible] DEC CLAMP [illegible] AT [illegible] #8 {5355 5379	[illegible] exp in violet [illegible] fine
~~00 15 E~~	~~70° 54~~		~~00~~	~~6.37~~	~~B9~~	~~8-~~	~~B8-B9 PROG [illegible]~~ #9 {5381 5384	*1
			~~00~~	~~6.29~~	~~B9~~			
00 01 E	70°	50'	00	6.37	B9	8-8	B8-B9 PROG [illegible] #9 {5385 5388.5	fine
00 00	76°	27'	00	6.29	B9	8-8	" #9 {5390 5393.5	fine
00 28 W	-05	22	00	6.27	B9	8-8	" #9 {5394 5397.5	fine
00 01 E	-09	01	00	6.01	B9	8-8	" #9 {5398 5401.5	fine

*1 FLEXIBLE COUPLING ON GUIDE CAMERA [illegible] SNAPPED APART EITHER AT BEGIN OR END OF [illegible]

Date 15 Dec (cont'd) TUES **Observer** ~~mc~~ RC **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
28000	HD 47964	6 36.0	+0 36	G40	IIa0.6	13	19°F	01:00 4	01 08	B
27,999	HD 51892	06 54.0	+07 27	"	"	"	19°F	01 20 6	01ʰ 31	A
28001	HD 56446	07ʰ 11.9	+06 51	G40	"	"	"	01 41 9	01ʰ 57	B
28002	HD 67725	08 04.2	-11° 3′	"	"	"	20°F	02 30 7	02 43	B
28003	HD 71833	08ʰ 3[illegible]	-20° 37′	"	"	"	19°F	02ʰ 5[illegible] 10	03ʰ 21	"
28004	HD 83650	09ʰ 34.7	-10° 07	"	"	"	"	03ʰ 47′ 8	04 02	13
28005	HD 89449	10 14.3	+19 59	"	"	"	19°F	04ʰ 21 2	04 25	"
28005 F,	focus test in in/out act			"	"	"	"			B.
28006	HD 104337	11 55.7	-19 06	G10	"	92	20°F	05 07 4	06 15	C

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions .... some clouds after 00 10.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible] 38	B	00 12 E	+00°33′	00	5.62	B9	8-8	B8-B9 #9 { 5402 5405	fine
[illegible]	A	00 7 E	+07°23′	0	6.28	B8	8-8	" #9 { 5407 54[illegible].5	fine
[illegible]	[illegible]	00ʰ03 W	+06 45	0	6.12	B9	8-8	" #9 { 5412 5415.5	[illegible]
[illegible]	R	00 05 E	-11 15	⊙	6.23	B9	8-8	" #9 { 5416 5419.5	fine
[illegible]	[illegible]	00ʰ25 W	-2[illegible]° [illegible]	0	[illegible]	[illegible]	8-8	" [illegible] #9 { [illegible]	[illegible]
[illegible]	[illegible]	00 16 E	-10°22′	0	6.17	B9	8-8	" field drawn (*) { 5426 5429.5	fine
[illegible]	[illegible]	0ʰ34 E	+19°40′	0	5.3	F5	15	STD. VEL.	[illegible]
	3						30/32		what star spec[illegible] [illegible]
[illegible] 5	C	00 23 E	-19°26′	0	5.28	B5	5-5	INTERSTELLAR LINE PROG #8 { 5433 5444	[illegible]

we don't use lantern plates any more. There are unbaked IIaO for focus plates now. JTH

- apparently there are no lantern slides for ~~PH 3 (?) loaded~~ (?) from test

*1 - COUPLING ON CAPPING DEVICE SNAPPED ~~AP~~ APART AGAIN, [illegible] LIKELY FORGED.

Date Dec 15/16, 1964 **Observer** Fl, Mse **Julian Day**

Plate No.	Object	R.A. 1900		Declination 1900		Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
		h	m	°	′							
28007	HD 212943	22	22.8	+04	12	G40	IIaO	13	21°	18 17	18 28	A
28008	HD 223311	23	43.4	−06	56	"	"	"	20°	18 43	19 12	A
28008F1	In-In/Out-Out											B
	Operations suspended until 21:30 — T.V. System being tested.											
28008F2	Focus Changed from 52 → 51.											B
28009	HD 19698	3	5.2	+11	30	"	"	"	18°	21 33	21 42	A
28010	HD 19736	3	5.5	+42	01	"	"	"	"	21 52	22 02	A
28011	HD 21933	03	27.1	+09	02	"	"	"	"	22 12	22 23	B
28012	HD 23258	3	38.6	+20	37	"	"	"	"	22 32	22 45	B
28011 F1	focus test in in/out out					"	"	"	18°F			A
F2	"						"		30°F	Focus	51	
F3	"						"		30°F	Focus "	50	

Dome Temp.

Focus

Dome Temp.

Hour Angle End

Dome Temp. ....

Transparency Conditions Good

Focus ....

Dome Temp. ....

Ending Time E.S.T.	Pl.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
9 28	A	h 1 m 24 W	+04° 21′	0	5.9	K0	5-5-5	Stndrd Velocity {Sens 9 (7counts) {5450 5457	[illegible]
9 12	A	0 47 W	-6 35	0	6.3	gK4	5-5-5	Check this stars Dec {Dec reading disagrees. Wrong *? Same Focus as previous night. Sens 9 (7counts) {5458 62	[illegible]
	B						40/40		[illegible]
	B						40/40		[illegible]
	A	0 04 E	+11° 46′	0	5.89	B9	12-12	B8 - B9 Sens 6 {5471 5474	[illegible]
		0 14 W	+42 15	1	5.95	B8	12-12	" " Sens 6 {5475 5478	
		0 15 W	+9° 15	0-1	5.59	B8	12-12	" " Sens 6 {5479 5481	[illegible]
		0 26 W	20 50	0-1	6.01	B9	12-12	" " Sens 6 {5482 5484	[illegible]
	A						40/40	(Developed)	
							40/40	Clouds 22:50.	
							40/40	Cleared Up.	

[illegible] Langg

83

Don Greening learning guiding

Date 16-17 DEC /64 **Observer** ~~M.S.e~~ L — ~~Mse~~ Mt **Julian Day**

WED-THURS

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	F
28013	HD 11857	01 51.4	61 12	640	IIaO un	13	35°F	20 23	(5) 20 33	B
28014	HD 10293	01 35.6	58 ? 08	"	"	"	35°F	20 50	(6) 21 01	A
28015	HD 9138	01 24.9	+05 38	"	"	"	36°F	21 11	(4) 21 19	B
28016	HD 19698	03 05.2	+11 30	"	"	"	"	21 34	(6) 21 46	A
28017	HD 19736	03 05.5	42 01	"	"	"	"	21 53	(7) 22 07	B
28018	HD 21933	03 27.1	+09 02	"	"	"	"	22 13	(6) 22 24	A
28019	HD 23258	03 38.6	+20 37	"	"	"	"	22 33	(6) 22 44	B
28020	HD 23383	03 39.7	55 37	"	"	"	"	22 52	(5) 23 02	A
28021	HD 29587	04 34.5	41 57	"	"	"	"	23 22	(20) 00 02	B
28022 F.	~~HD 40574~~	~~08 54.6~~	~~-01 37~~	~~"~~	~~"~~	~~"~~	~~"~~	—	—	A
	focus test in in/out-out			"	"	"	"			B

Dome Temp. 3 5 P/1=

Focus ....

Dome Temp. 34°F

Transparency Conditions FAIR-GOOD
00:10 clouds

Ending Time E.S.T.	P	Hour Angle End	Declination		Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
20 33	B	00 04w	61	34	0	6.00	B8	12-12	field drawn B8- B9 PROG.	#6 {5486 5488	[illegible]
21 01	A	00 48w	58	25	0	6.19	B9	12-12	"	#6 {5490 5492	fair
21 19	B	01 17w	+06	00	0	6.2	K4	12-12	STD VEL	#6 {5493 5496	fair
21 40	A	00 04w	+11	45	0	5.89	B9	12-12	B8- B9	#6 {5497 5499	fair
22 07	B	00 24w	42	16	0	5.95	B8	12-12	"	#6 {5500 5502	fair
22 24	A	00 20w	+09	16	0	5.59	B8	12-12	"	#6 {5503 5505	fair
[illegible]	B	00 38W	20	52	0	6.01	B9	12-12	"	#6 {5506 5508	fair
23 02	A	00 45w			0	6.02	B9	12-12	"	#6 {5509 5511	fair
[illegible] 02	B	00 50w	42	05	0	7.7	G2	8-8-8	STD. Vel.	#8 {5512 5527	[illegible]
~~[illegible]~~	A	~~—~~			~~0~~	~~6.35~~	~~B9~~		~~B8 - B9~~	~~#6 {55[illegible]~~	
	B							40/40			c to red.

* PLATES BETWEEN 28013 & 28018 NUMBERED ONE LESS THAN IS CASE i.e. - 28013 NUMBERED 12. 28019 ~~[illegible]~~ ON ARE OK

Dome Temp.
Focus
Dome Temp.

Date 17-18 Dec /64 Thurs-Fri **Observer** Co Mac **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
							24°F				
28021 F2	Focus Test & [illegible]			C40	IIaO	13	24°F			A	1h 30m W
F3	Flexure Test			C40	IIaO	13	24°F			B	1h [illegible] 3h W
F4	Focus Test			C40	IIaO	17	24°F			A	3h W
F5	Focus Test			C40	IIaO	13	24°F			B	2h E
F6	"			"	"	18	"			A	3h W
F7	"			"	"	13	"			B	3h W

(1) Observer narrowly escaped injury when step on south pier upon which he was standing broke - PLEASE FIX

(2) Please fix ~~at~~ handle on observing hop.

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions ...... A few clear intervals

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						Opened up ~ 19h 15m closed up 19h 45m	
2h 30m W	+35°				40/40		Focus OK
Meridian – Outside 3hr W – Inside					30 – 30		Flexure present
3hr W	+35°				40/40	plate broken while developing To test effect of slitwidth on resolution	
2hr E	+35°				40/40	To check reproducibility of focus	Focus good
3hr W	+35					7(2) v. slightly out ~ 4000 Å	
3hr W	35					7(4) sl. more out than (2) ?	
						75 perfect	
					30/30		
					40/40		

Also see Trend in Trend in vault

CONTINUED →

Date 17-18 Dec/64 Observer Hb-Mse Julian Day
Thurs - Fair

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28022	HR 1985 HD 38478	05 41.0	+15 47	G140	IIa0 6	13	22°F	00 48 [7]	01 01	A	00 44
28023	HR 2413 HD 46885	06 30.7	+4 35	"	"	"	19°F	01 04 [12]	01 27	B	00 21W
28024	HR 2509 HD 49333	06 42.8	-20 55	"	"	"	18°F	01 34 [14]	02 05	A	00 51W

Dome Temp.
Focus
Dome Temp.

Dome Temp. 18°F

Focus

Dome Temp.

Transparency Conditions good ~ full moon

0150 AC

Ending Time E.S.T.	P	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	A	00 48 W	+15 52	0	5.46	B8	8-8	38-139 #6 {5533 5535	fine
[illegible]	B	00 25W	+04 32	0	6.44	B9	8-8	" developed #6 {5535 5537 (*1)	
[illegible]	A	00 52W	-20 58	0	5.3	B8	8-8	HELD UP BY CLOUDS " #6 {5537 5538.5	good [illegible] small part of [illegible] [illegible]
								0230 - closed up	

*1 - plate 28023 in wash in drkrm.

Date Dec 18-19, 1964 **Observer** Fly, Mt **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
		h m	° '								
28025	HD 217312	22 54.8	+62 32	G10	IIaOb	13 short	18°	17 58 [9?]	21 02	C	3 3? W
28026	φ Per	1 37.4	+50 11	"	"	9	16°	21 26 [10]	21 46	B	1 40 W
28027	BD 59° 612	3 07.3	+59 33	G40	"	17	15°	22 09 [11]	23 30	A	1 52 W
	~~BD 37 1292?~~	~~5 35.9~~	~~+37 56~~	~~"~~	~~"~~	~~"~~	~~15°~~			~~B~~	
28028	HD 42259?	6 04.6	-05 03	"	"	"	15°	00:08 [30]	01:07	B	[illegible] W
28029?	HD 50021?	6 46.5	-13 07	"	"	"	14°	01:19 [39]	02:37	A	1 33? W
28030?	HD 71833	8 24.6	-20 37	"	"		15°	02:54 [29]	03:33	B	0 40 W
28030 F	focus test in in / out out										
~~28030 F₂~~											

Dome Temp. .... EST CLOCK SEEMS TO BE ~2m SLOW FL.

Focus ....

Dome Temp. ....

Transparency Conditions Good-Fair - Full Moon!
20:30 light cloud
03:10 cloud

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
3 27 W	62 54	0	1.8	B0IV	5-5-5	Hd Bin some light cloud during last ½	sens 8 {5542 5584	weak
1 40 W	50 32	0-1	2.95	B0p	5-5-5	Spec. for C-10	sens 6 {5585 5603	fine
1 52 W	59 46	0	9.33	B1:Vpnne	5-5-5	Some light cloud. Cn Be. Rebalanced before this exp.	sens 9 {5603 5633	fine
~~		~~0~~	~~9.28~~	~~B3Vpe~~	~~5~~	clouds at start " "	" 9 {5634	SKY TOO CLOUDY
0 35 W	-05 02	0	8.87	B0e (III-V)	5-5-5	Cn Be	sens 9 {5645 5675	fine
1 23 W	-13 11	0	8.52	B3pe	5-5-5	"	sens 9 {5676 5706	fine
0 40 W	-20 49	0	6.4	B8	5-5-5	B8-B9 held up by clouds	sens 6 {5708 5710	fine
					30/30			[illegible]

CLOUDS

91

Date 3-4 JAN/65 SUN-MON **Observer** Hd - Mre **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28030F2	Focus Test	in · in	out out	G40	IIaO(u)	13	27	18h 7m		A	Focus
28031	HD 220116	23 16.1	57 43	"	IIaOb	13	26°F	18H 17m	19 25	A	02 41
										/	

Dome Temp.
Focus 50
Dome Temp.

Dome Temp. ....

Focus 50 for G 40

Dome Temp. ....

Transparency Conditions good

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	A	Focus setting		5.0 ~~9.27~~		~~3051~~	50/50	Sid clock in error? ~~#9~~ {~~5571~~}!	Focus Obs
19 25	A	02 41 w	58 05	1	9.28	3051 pc	6-6-6	Cr Be prog. clouds 19:00 #9 (30) {5713 ~~5743~~} 5738	fine

TELESCOPE BURNED OUT.
- DIMMING LAMP ON EXP MTR ON
- 9H B(G40) LOADED IN DRKRM IN N PIER

93

Date 4-5 Jan/65 MON · TUES **Observer** [illegible] **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28032	HD 44131	06 15.0	-02 54	640	IIa0 b	13	26°F	22 47	23 25	B
28032 F1	focus test	in · in	out · out	〃	IIa0 (d)	13	23°F	—	—	B
28033	HD 51688	06 53.3	26 03	〃	IIa0 b	13	〃	23 53	00 13	B

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions "variable cloudiness"

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	2	0 12 E	-02 55	[illegible]	6.5	M1	6-6	STD OVEC clouds #7 {5747 (3½ counts) /8	l weak
	3						50/50		
[illegible]	8	0 04 E	25 59	0	6.27	B9	6-6-6	B8-B9 PROG #7 {5751 5755	sl centred to red.
								QUITE OVERCAST [illegible]	fine.
								1PH A & B [illegible]	

Date 5-6 JAN/65 TUES - WED **Observer** MSE - HR **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
2803~~3~~ 4	HD 44637	06 17.7	+15 09	G140	IIa0 6	1.3	32°F	22 29 [14]	22 57	A	00 39 E
280~~34~~ 35	HD 45314	06 21.6	+14 57	"	"	"	"	23 04 [7]	23 18	B	00 24 E
2803~~5~~ 6	HD 50083	06 46.5	+05 13	"	"	"	31°F	23 32 [7]	23 46	A	00 20 E
28037	HD 52721	06 57.2	-11 09	"	"	"	"	00 03 [8]	00 19	B	00 03 E
28038	HD 65176	07 52.4	-01 20	"	"	"	29°F	01 01 [52]	02 45	A	01 3? W
~~28039~~	~~HD 65875~~	~~07 55.8~~	~~-02 36~~	~~"~~	~~"~~	~~"~~				~~B~~	
~~28040~~ 28039	HD 92588	10 36.3	-01 13	"	"	"	27°F	02 57 [15]	03 27	B	[illegible] E
28040	HD 83650	09 34.9	-10 07	"	"	"	"	03 42 [6]	03 54	A	[illegible] W
28041	HD 103095	11 47.2	+38 26	"	"	"	"	04 06 [8]	04 22	B	00 38 E
28042	HD 107328	12 15.3	+03 53	"	"	"	26°F	04 54 [5]	05 04	A	00 3? E
28042 F1	focus test	in in/out out		"	IaO(a)	"	"			A	

A MORE EXTENSIVE PROGRAM IS NEEDED FOR -

Dome Temp.
Focus
Dome Temp.

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions good

0100 A few clouds

0500 MORE CLOUDS.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
22 57	A	0.0 39 E	+15 .09	0-1	7.7	B3e	6-6-6	Hd. - Be Prog #8 (10) {5758 5768	Striking
23 18	B	00 24 E	+14 56	1	7.1	B2 ne	6-6-6	" #7 (4) {5769 5773	fine
23 46	A	00 20 E	+05 09	1	6.8	B2e	6-6-6	" #7 (4) {5774 5778	guiding?
00 19	B	0:0 03 E	-11 15	1	6.6	B3e	6-12	" #7 (4) {5779 5783	guiding?
[illegible] 45	A	01 35 W	-01 31	1	8.1	B5ne	6-6-6	" #8 (10) {5786 5796	fine
	8				6.4	B2e		" #6 (2) {	
[illegible] 27	B	0 27 E	-01 33	1	7.4	K.1	6-6-6	STD. VEL. #7 (10) {5798 5808	fine
[illegible] 54	A	01 00 W	-10 24	0	6.17	B9	9.9	B8-B9 #6 (2) {5809 5811	fine
[illegible] 22	B	00 38 E	38 00	1	7.3	G5	6-6-6	STD. VEL #7 (10) {5812 5822	fine
[illegible]	A	00 30 E	+03 29	1	6.1	K1	6-6-0	" #6 (4) {5823 5827	fine
							50/50		[illegible]

NEEDED FOR THE LATTER PORTION OF 2nd HALF!!!

PH B (G40) LOADED IN N. PIER.

Date 6-7 JAN/65 WED-THURS **Observer** L - R~~c~~ Ron Gueiming Jm Mse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28043	HD 2789	0 26.3	66 36	G40	IIa0b	17	34°F	17 46 (49)	19 24	B	01 42
28044	ρ PERS HD 10516	01 37.4	50 "	G10	IIa0b	9XL	30°F	19 40 (11)	20 02	C	01 09W
28044 F,	focus test in in/out out			"	"	9				C	
28045	HD 21933	03 27.1	09 02	G40	"	13	"	20 43 (4)	20 50	B	00 03 W
28046	HD 23258	03 38.6	20 37	"	"	"	"	21 00 (4)	21 07	A	00 13 W
28047	HD 23552	03 41.0	50 26	"	"	"	"	21 14 (4)	21 21	B	00 23
~~28048~~	~~HD 23594~~	03 41.3	56 49	"	"	"				~~A~~	
	REQUIRE FIELD DIAGRAM FOR HD 23594										
28048	HD 30122	04 39.7	+23 27	"	"	"		22 06 (5)	22 15	A	
~~28049~~	~~H.D. 31373~~	~~04 50.2~~	~~+14 54~~	"	"	"	28°F	22 23 (7)	22 37	A	
280~~50~~ 46	HD 33647	05 06.6	00 24	"	"	"	29°F	23 34 (12)	23 57	B	
~~2805~~1 0	HD 47431	06 33.5	+4 47	"	"	"	"	00 08 (7)	00h 22	A	
28052 1	HD 53929	07 01.8	+05 04	"	"	"	"	00h 46m (8)	01h 02	B	
~~28053~~	~~HD 61181~~	~~07 30.1~~	~~-27° 42~~	"	"	"	28°F			A	
280~~53~~ 47	HD 63655	07 47.7	-13° 6	"	"	"	[illegible]	01 30 (8)	01 46	A	
280~~54~~ 48	HD 71906	08 24.8	37 36	"	"	"	27°F	02 ~~30~~ (12)	02 24	B	

Dome Temp. 34°F

Focus ....

Dome Temp. ....

Transparency Conditions Poor – l. cloud overhead. Cloud over entire W. horizon. General haze all evening

Ending Time E.S.T.	P.H.	Hour Angle End	Declination		Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
24	B	01 42W	66	59	1	8.61	B2e	6-6-6	cn-Be	#8 (20) {5829 5849	poor guiding (red); fine break
02	C	01 09W	50	31	0-1	3.95	B0p	5-5-5	SPEC. FOR G.O	#6 (20) {5850 5870	guiding
	C							30/30			l weak contrast [illegible]
10		00 08W	09	15	01	5.59	B8	9-9	B8 B9	# 6 (2) {5871 5873	fine
07	A	00 13W	+20	49	0-1	6.01	B9	9-9	" [illegible] (red); FIELD FLATTENER NOT IN POSN	#6 (2) {5874 5876	strong [illegible]
2	B	00 23	50	39	1	5.87	B8	9-9	" Flaw on plate [illegible] (red)	#6 (2) {5877 5879	[illegible]
	B					~~6.46~~	~~B4~~		~~"~~	~~#6 (2) {5880 5882~~	
						~~6.12~~	~~B8~~	~~9~~		~~(2) {5880 5882~~	
15	A	00 20W	23	34	1	6.12	B8	9-9	" * Comp. messy (red)	#6 (2) {5880 5882	[illegible]
37	A	0 32W	15	00	1	5.69	B8	9-9	" some clouds [illegible]	#6 {5883 5885	[illegible]
55	B	01 30W	+06	27	0	6.56	B9	9-9	"	#6 {5886 5888	fine
22	A	00.24	+4°	47	0	6.53	B9	9-9	" * Comp. messy. Plate upside [illegible]? No! (red)	#6 {5890 5891	fine
	B	00 47	+4°	58	1	5.90	B8	9-7	" * Comp. very messy. Plate upside down? No! (red)	#6 {5892 5894	[illegible]
	A					~~6.5~~	~~B8~~		~~"~~ * No immediate explanation (red)	~~#6 {5895 5897~~	
	A	00 48W	-13	14	0-1	6.10	B9	9-9	" Tests show that field flattener (red)	[illegible]	fine
		00 52W	37	24	0	6.04	B9	9-9	" not advanced in plate upside down [illegible] (red)	#6 {5898 5900	fine

Date cont'd **Observer** **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
280~~58~~ 49	HD 82327	09 26.2	74 47	G40	IIaO	13	26°F	02 37	02 51	A	00 08
280~~56~~ 50	HD 92588	10 36.3	-01 13	"	"	"	"	03 01	04 11	B	0' [illegible]

Dome Temp.

Focus

Dome Temp.

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions general haze

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2:15		00 08 w	74 23	0	6.36	B9	9-9	B8-B9 6 { 5901 5903	fine
[illegible]		0° 20 w	-1° 34	0	7.4	K1	6-6	STD. VEL. clouding over 0400 7 { 5904 ~~5906~~, 909 }	fine comp lines very bad – probably unusable

- SEVERAL LIGHTS BURNED OUT IN DOME
- GROUND WIRE ON CONTROL BOX LOOSE

Date 7 JAN '65 **Observer** Myze **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle End
28055 F_1	test – full aperture			G40	IIaO(u)	13L –	32°F			A	– field
28055 F_2	"	"	"	"	"	13L	"			"	– "
28055 F_3	focus test in-in/out-out			"	IIaOb	13	34°F			A	
28055 F_4	"	"		"	"	13				B	
28055 F_5	"	"		G 10	"	9				A	modified
28055 F_6	"	"		"	"	9				"	

- adjusted arc length prior to tests.
- a IIaOb in n. pier for G40
→ no IIaO(u) for G40
- 20 IIaOb for G10 in n pier

- left instrument w/ G10 in pos'n

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle End
28055 F_7	focus test in-in/out.			G10	IIaOb	9	32°F			A	

Dome Temp.
Focus
Dome Temp.

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions ....

Ending Time E.S.T.	P	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	A	- field	flattener	not	in	pos.	18	similar to # 28046	
	"	- "	"	in pos,	plate upside	down	18	barely visible blackening	
	A						25/25	[illegible]	
	B						25/25	"	
	A	modified	* (test focus + consistency)				30/30	[illegible]	
	"						30/30		
								* Front holding curved pieces installed	
								change focus on 6/10: setting from 0.2 to 0.1	
	A						30/30		

103

Date Jan 9-10, 1965 Sat-Sun **Observer** Fl, V- **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
		h m	° ′							
28056	φ Per	1 37.4	50 11	G10	IIaOb	9	25°	19:16	19:32	C

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. ....

Transparency Conditions ... Poor

Focus ....

Dome Temp. ....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
19:32	C		~~+50 31'~~	~~0~~	~~3.95~~	~~B0p~~	5-10	Some clouds. ~~Special for G10~~ ← PLATE BROKEN Sones 5 {5914 / 5916}	

Sudden snow flurry - could not close shutters immediately due to position of dome - result: some snow probably fell on mirror.

Clouds

Some trouble with handbox - works well when grounded to spectrog.

Date JAN 10-11/65 SUN-MON **Observer** Hd-(He) Mae **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28056	φ PERS HD10516	01 37.4	+50 11	G10	IIaOb	9 XL	24°F	17 43	25 18 33	A	E 5m
28057	BD+54°398	01 45.8	+54 51	G40	IIaOb	13	21 F	19 00	45 20 30	B	W1 44
28058	HD 23552	03 41.0	+50 26	G40	IIaOb	13	21°F	20 35	8 20 48	A	00 01 W
~~28060~~	~~HD 23662~~	~~03 41.8~~	~~68 12~~	~~G40~~	~~IIaOb~~	~~13~~	21°F	~~20 55~~		B	

Dome Temp. 25 °F
Focus
Dome Temp.

Transparency Conditions
- excellent at start
- extensive haze from 5 ~ 1900
- haze cleared by 2000, ~~partly clouds~~

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
18 33	A	E 5m	50 32	0-1	3.95	Bop	5-5 ·5'	SPECIAL FOR G10 — #6 (30) {5924, 5954}	fine
20 30	B	W 1h 44m	55 10	0	8.44	Bope	6-6-6	Cn Be-Prog — #9 (30) {5955, 5985}	fine
[illegible] 48	A	00 06 W	50 38	0	5.87	B8	9-9	B8-B9 PROG. — #6 (2) {5985, 5987}	fine
	B		~~68 25~~	~~0~~	~~6.28~~	~~B8~~	~~9-~~	~~B8-B9 PROG~~ clouds **Clouds** — #6 (2) {5988, 5990}	fine

- GROUND WIRE FOR CONTROL BOX IS LOOSE

Date Jan 12-13, 1962; Tue-Wed **Observer** Fl, Mse; — Hr **Julian Day** ....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28058a	HD 222847	23 39	−18 52	G40	IIa0/b	13	24°F	17 52	[15] 18 18	B	[illegible]
28059	HD 11291	01 45.8	+50 18	"	"		24	18 31	[5] 18 40	B	00 02
28060	HD 23950	3 44.0	+21 57	G40	IIa0b	13	24°F	18 50	[10] 19 09	B	01 2[illegible]
28061	HD 23363	03 39.5	−01 29	"	"	"	"	19 15	[5] 19 24	A	01 06 E
~~28062~~	~~HD 23324~~	~~3 39.2~~	~~+24 32~~	~~"~~	~~"~~		~~"~~			~~B~~	
28061 F				G10	"	9	20°F			A	
F2	focus tests in-in/out/out			G10	"	9	"			B	
F3				G10	"	9	"			C	
28062	HD 36665	05 28.3	+27 59	G40	IIa0b	17	"	21 15	[14] 21 42	B	00 [illegible]
28063	BD +37° 1292	5 35.9	+37 56	"	"	"	23°F	21 48	[36] 23 00	A	00 [illegible]W
~~28064~~	~~HD 50846~~	~~06 50.0~~	~~−23 48~~	~~"~~	~~"~~	~~13~~	~~"~~	~~23 16~~	~~23 45~~	~~B~~	~~00 [illegible]~~

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions Poor

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible] 14	3	01 46W	18 33	0	5.21	B8	9-9	B8-B9 6 {5991 5993	fine
[illegible] 40	3	00 02W	+50 39	0	5.62	B9	9-9	B8-B9 6 {5994 5996	[illegible]
[illegible]	3	01 27E	+22 11	0	5.90	B9	9-9	B8-B9 6 {5996 5998	fine
[illegible] 24	A	01 06 E	-01 16	0	5.04	B8	9-9	" CLOUDS 6 {5999 6001	fine
	~~B~~			~~0~~	~~5.98~~	~~B8~~			
	A						30-30	CLOUDS!	O.K.
	B						30-30		O.K.
	C						30-30		[illegible]
[illegible] 42	2	00 37E	+28° 02	0	8.40	B1e [III-V]	6-6-6	G-Be PROG Seems to be star missing in sky set on finder charts | otherwise [illegible] O.K. 20' 9 {6003 6023	fine
[illegible] 20	A	00 32W	37 58	0	9.28	B1pe	6-6-6	" " " clouds 40' 9 {6025 6055	fine
~~[illegible]~~		~~00 05W~~	~~-24 06~~	~~0~~	~~6.6~~	~~WR~~	~~6-1-2~~	~~WR star for 5-6~~ clouds! 9 {6055 ~~6025~~ 6061	too weak

0130 Completely Overcast.

109

Date 13-14 JAN/65 Observer L — Julian Day
WED-THURS M se

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
28064	HD 2789	0 26.3	+66 36	G40	IIaOb	17	22°F	17 55 31	18 57	A	1 42 W
~~28~~											
28064T	Calibrated step wedge.										

Dome Temp.
Focus
Dome Temp.

Dome Temp. 24°F

Transparency Conditions ....

Focus ....

Dome Temp. ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1 42W	70 .00	0	8.61	B2e	6-6-6	Ar - Be #9 (30) {6064 / 6094}	fine

111

Date Thursday Jan. 1965 **Observer** Mac Co — Hb **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28064 F	~~Focus Test~~ [illegible]			G40	IIa0b		0°F			B	
28065	HD 2789	0 26.3	+66 36	G40	IIa0b	17	-1°F	18 11	50 19 51	B	2 [illegible] W
28066	BD 59° 612	03 07.3	+59 33	G40	IIa0b	17	-5°F	20 20	81 23 02	B	3 [illegible] W
28067	HD 55439	7 07.8	-9 40	G40	IIa0b	17	-6°F	23 31	44 00 59	A	0 [illegible] W
28068	HR 3019 HD 63112	7 42.1	-12 26	G40	IIa0b	13	-6°F	01 26	10 01 46	B	0 [illegible] W
28069	HR 3042 HD 63255	7 44.9	-13 6	G40	IIa0b	13	-6°F	01 52	12 02 17	A	0 [illegible]
28070	HR 3155 HD 67725	8 4.2	-11 3	G40	IIa0b	13	-7°F	02 24	14 03 01	B	0 [illegible]
28071	HR 3201 HD 68099	8 5.9	+10 7	G40	IIa0b	13	-6°F	03 12	9 03 29	A	0 [illegible] W
28072	HR 3458 HD 74393	8 38.7	+4 42	G40	IIa0b	13	-6°F	03 35	15 04 05	B	[illegible]
28073	HR [illegible] HD [illegible]	9 34.9	-10 07	G40	IIa0b	13	-6°F	04 19	28 05 [illegible]	A	[illegible]
28074	HD 114447	13 05.5	+39 02	G40	IIa0b	13	-6°F	05 26	12 05 50	B	[illegible] W
28073T	Calibrated Step Wedge										
28074T	"	"	"								

Fuse blew on shutters

Exposed plates in darkroom drying plates in N [illegible]

Dome Temp.
Focus
Dome Temp.

Dome Temp. 0°F

Focus

Dome Temp.

Transparency Conditions Excellent
Bright moon
0500 — seeing is extremely poor.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
							25/25		centre to weak
[illegible]		2h 38m W	67 00	0--	8.61	B2e	6-12	Cn - Be — Slit length is too long — was not changed after focussing. #9 30 {6117 / 6131}	weak guiding.
[illegible]		3h 09m W	+59 48	0-	9.33	B1:V: pane [III-V]	6-6-6	Cn - Be * because telescope was at ..., #9 6131 / 6161	fine.
[illegible]	A	01 09 W	-9 47	0	8.58	B3e	6-6-6	Cn - Be * #9 {6163 / 6193}	luck
[illegible]	B	01 22 W	-12 34	0	6.37	B9	9-9	B8 - B9 #6 {6194 / 6196}	fine.
[illegible]		01 50 W	-13 15	0	6.10	B9	9-9	B8 - B9 #6 {6197 / 6199}	fine.
[illegible]		02 51	-11 15	0	6.23	B9	9-9	B8 - B9 #6 {6200 / 6202}	luck
[illegible]	H	02 40 W	+9 57	0--	6.05	B9	9-9	B8 - B9 #6 {6203 / 6205}	guiding?
[illegible]		02 43 W	+04 2?	0-	6.28	B8	9-9	B8 - B9 #6 {6206 / 6208 / 6209}	fine.
[illegible]		02 59 W	-10 25	0-	6.17	B9	9-9	B8 - B9 #6 6211	fine fixed
[illegible]	R	0 04 W	+33 42	0--	6.3	F0	9-9	0530 CI↑ #6 {6212 / 6214}	improving guiding?

- 23 15; NO DEC SLOW MOTION.
* HAD DIFFICULTY SETTING TELESCOPE BECAUSE DEC. SM. WOULD NOT ENGAGE. FINALLY SET TELESCOPE BY PUSHING ON SPECTROGRAPH.
- FOUND TELESCOPE FAR OUT OF FOCUS; NECESSARY TO PUSH IT BY HAND TO CORRECT [illegible]

113

[illegible]

Date Fri/Sat Jan 15/16 **Observer** V + [illegible] B **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
28075	HD 11291	01 45.8	+50 18	540	II-0b	15?	+1°F	18h55m19	19 32	B
~~28076~~	~~Focus~~									F
	Jan 16/65 Hd	Found slit set at 9 – changed to 13								
28075 F1	Focus test	in-in/out-out		640	IIa0B	13	−4F			A
28075 F2	" "	"	"	"	"	"	"			A
28075 F3	" "	"	"	"	"	"	"			A
F4	"		"	"	"	13	+2°F			B
F5	" "			"	"	13	+2°F			A

Dome Temp. +1°F

Transparency Conditions thick cirrus

Focus

Dome Temp.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
9:32	B	1h 13m	50° 30'	0	5.6	Bg	6+6+6	BB Bg N.B Dec. 1 contour,	strong
	[illegible]	[illegible]						Stopped. Clouds	
5 13									
	P.	Focus setting changed					30/30	from 50 to 47 [illegible]	[illegible]
	A						30/30	Focus setting 48 more [illegible]	[illegible]
	A						30/30	" " 49 most [illegible]	[illegible]
	3						30/30	44 setting 46 might be best.	detail
	1						30/30	45 or even lower value	good.

Date Sat-Sun Jan 16-17 1965 **Observer** Cn - RC **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
28076	BD+50° 360	01 42.2	+50° 37′	C40	IIa-O b	21	0°	18 30 ^{60}	20 30		02 12W
28077	BD+37° 1292	05 35.9	+37 56	"	"	17	-3°F	20 40 ^{50}	22 20		00 03W
28078	BD+25° 970	05 40.2	+25 30	"	"	17	-4°F	22 27 ^{44}	23 55		01 39W
28079	HD38708	05 42.6	+29 06	"	"	17	-6°F	00 00 ^{23}	00 46		02 28W
~~28 080~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~				-7°F	01 32	03 44		[illegible]
28080	BD +44° 2112	11h 33.2	+44° 39	"	"	11	-8°F	04h 12 ^{55}	06 02	A	[illegible]
28080T	Calibration Step Wedge										

Jan 18, 1964 Dome temp +18° F

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
28080F1	Focus Test			C40	IIa-O b	13	18			A
F2	"			"	"	13	18			B
F3				C10		9	17			A

Dome Temp.
Focus 25
Dome Temp.

Dome Temp. 0°F

Transparency Conditions Excellent but full moon.

Focus 45

Dome Temp.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
[illegible]	02 12W	+50 59	0	9.52	B3ne	5-5-5	Cr Be Had trouble identifying star. See finder finder. Right 1/4 in (Jan 18)	#9 6230 62[illegible]	poor guiding / [illegible]
[illegible]	00 08W	+38 00	0	9.28	[illegible]	6-6-6	Cr Be	#9 62[illegible]	[illegible]
[illegible]	01 39W	+25 33	0	8.63	B3ne	6-6-6	Cr Be	#9 6293 6323	[illegible]
[illegible]	02 28W	+29° 09	0	5.5	[illegible](e)	6-6-6	Cr Be	#9 63[illegible] 6353	poor guiding
[illegible]	01h 34W	+44° 1'	0	7.15	F9	6-6-6	std [illegible] (circled) plate broken	#9 6355 6385	
[illegible]	1h 55W	+44° 18'	0	9.65	F?	6-6-6	~~[illegible]~~ KA-5 — No! (KA-5)	#9 6356 64[illegible]	

Declination	Comp.	Quality
Focus 45	30/30	[illegible]
Focus 49	30/30	good
Focus 1	30/30	good

Date Mo/Tu Jan 18-19 1965 **Observer** vdB - SK - Mt (Mae) **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
354-3165	ξ² Cet	2 26.3	+08 18		6/4/1	28		18 38			0h 2m 5
354-3166	ξ² Cet	"	"		6/4/2	"		18 55			[illegible]
354-3167	ξ And	2 1.8	+42 10		5/5/2	"		19 39			[illegible]
354-3168	"	"	"		"	"		19 54			1h 3
354-3169	φ Cas	1 17.8	+57 53		6/5/2+3	"		20 10	2x + Sky		[illegible]
354-3170	α Per	3 21.9	+49 44		4/6/3	"		20 51	2x		[illegible]
354-3171	η Per	2 48.0	+55 49		6/4/3 ? 6/5/3 + Sky	"		21 20	3x + Sky		[illegible]
354-3172	ν Per	3 42.8	+42 16		5/5/3	"		22 20	2x		[illegible]
~~28081~~	~~BD +45° 1753~~	~~9h 35.7m~~	~~+45° 30'~~	~~G-40~~	~~II a0b~~	13	5°F			A	
28081	HD 83650	9h 34.9m	-10° 07'	G-40	II a0b	13	5°F	01 41	16 02 12	A	[illegible]
28082	HD 92588	10 36.3	-01 13	G-40	I a0b	13	4°F	02 20	23 03 06	B	[illegible]
28083	BD +45 1859	10 38.3	+45 12	"	"	"	3°F	03 18	97 06 32	A	[illegible]
28083 T.	Calib. for Sky Image										

Dome Temp. ....

Focus ....

Dome Temp. ....

CO_2 in } V=700 } 17:30

Transparency Conditions Night doubtful / Full Moon / thin blowing snow

ptm after 1900

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0h12m E	C	6"	4-3	B9III		EXT. ST } Not ptm	
0h6m W		6"	"	"		"	
1h17 W/1h29		5"	5.6	K3II		I OK	
1h30		5"	"	"		I ↓	
2h34m + 46m		5"	5.0	F0Ia		I	
1h11m + 1h21 W		5"	19	F5Ib		I a little hazy [illegible]	
2h14 + 2h3.5W + 2h35		5"	39	K3Ib		I { haze, high light columns, [illegible] E	
2h1.5m 2h30		5"	38	F5II		I { ≡ vertical bars	
						Clouds - Fine	
						KAES [illegible] focus at #47 Sky [illegible]	
00 23 E	-10 22	0	6.17	B9	6-6-6	B8-B9 sens 6 { 64 21 / 64 23 / 64 24	fine
0h0m	-01 23	0	7.4	K1	6-6-6	Std Vel. #8 [illegible]	fine
3h46m W	44 53	0	9.59	F4	6 12	KAES #9 [illegible]	fine

Date 21-22 JAN/65 **Observer** R. C., vB Hb **Julian Day**

7H-FR

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle End
35ST 1	ν And	00 47.8	+40° 53′		τ = 10			1830	- 1900		1h 20 W
2	HD 9927	01 35.7	+48 26		τ = 10			1910	- 1926		1h 20 W
3	ν And				τ = 10			1931	1950		2 30 W
4	HD 9927				τ = 10			1953	- 2025		
5	ν And				τ = 10			2030	- 1946		3 30 W
6	HD 9927				τ = 10			2050	- 2108		0 50 W
7	ν And	03			τ = 10			2125	- 21 42		[illegible] W
8	HD 9927	01 35.7	48 26					21 50	- 22 09		04 12 W
9	"	"						22 11	- 22 27		04 23 W
10	134 Tau	05h 47.4	+12° 38′		τ = 10			22 39	- 22 55		[illegible] 39 W
11	κ Gem	07h 42.2	+24° 29′		τ = 10			23h 03m	23h 23m		0h 53 E
12	HR 1861	05 30.8	- 01 37		τ = 10			23 30	- 23 50		01 48 W
28084	HD 63112	07 42.1	-12 26	G40	IIaO6	13	20°F	00 48	00 56	B	01 01 W
28085	HD 63655	07 44.9	-13 06	"	"	"	"	01 12	01 22	A	[illegible] W
28086	HD 67725	08 04.2	-11 03	"	"	"	"	01 28	01 40	B	01 21 W
28087	HD 68099	08 05.9	+10 07	"	IIaO6	13	20°F	01 45	01 58	A	1 36 W

Dome Temp.
Focus
Dome Temp.

Dome Temp. 25°F
Focus 49½
Dome Temp.

17 30 CO_2 in
700 V

Transparency Conditions Fine
Windy

Ending Time E.S.T.	P.P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
19 ?0		1h 29 W	– 1h 59 W	1	4.53	B5 II			
19 ??		1h 20 W	– 1h 36m W	1	3.56	K3 III			
19 50		2h 30 W	2 – 49 W	1					
20 25			– 2h 37 W	1				done 1½ times	
19 46		3 30 W	3 46 W	0					
21 08		03 01 W	3 19 W	0					
21 42		04 28 W	04 42 W	0		~~[illegible]~~			
22 09		04 02 W	04 21 W	0		K3 III			
22 27		04 23 W	– 04 39 W	0				EXPOSURE METER 15 COUNTING (?) MUCH TOO SLOWLY	
[illegible]		~~4~~0 39 W	– 0 55 W	0–1	4.90	B9 IV			
[illegible]		0h 53m E	0h 31m E	0–1	3.57	G8 III			
[illegible]		01 48 W	02 08		5.35	B1 III		Ran out of dry ice	[illegible]
[illegible]		01 01 W	– 12 34	1–2	6.37	B9	9 – 9	B8 – B9 [illegible] exposure. [illegible] { [illegible]	[illegible]
[illegible]		01 22 W	– 13 14	1	6.10	B9	9 – 9	B8 – B9 " ~~[illegible]~~ 6 6481	[illegible]
[illegible]		01 21 W	– 11 14	1–2	6.23	B9	9 – 9	B8 – B9 " —	[illegible]
[illegible]		1 36 W	+ 09 57	2	6.05	B9	9 – 9	" —	

Date 22 Jan [illegible] **Observer** Hb/Mse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
28088	HD 71906	08 24.8	37 36	G40	IIaOb	13	20°F	02 08	02 20	8	01 39
28089	HD 74393	08 38.7	+04 42	G40	"	"	20°F	02 25	02 40	A	1 46w
28090	HD 74604	08 39.8	67 05	G40	IIaOb	13	20°F	02 46	03 02	B	1 58w
28091	HR 3774 / HD 82327	09 26.2	+74 47	G40	IIaOb	13	20°F	03 08	03 20	A	1 41w
28092	HD 93427	10 47.1	+65 40	G40	IIaOb	13	20°F	03 31	03 38₃₀	B	0 40w
28093	HD 92728	10 37.4	+57 43	G40	IIaOb	13	22°F	03 44	03 51	A	0 58w
28094	HD 96314	~~-24 45~~ 11 01.1	-26 45	G40	IIaOb	13	21°F	04 02	04 22	F	0 01N
28095	HD 107348	12 15.4	-21 39	G40	IIaOb	13	22°F	04 34	04 52	A	0 22w
28096	HD 114447	13 05.5	39 02	G40	IIaOb	13	22°F	05 00₃₀	05 17₃₀	B	00 03 E
28097	HD 115612	13 13.2	+68 56	G40	IIaOb	13	22°F	05 22	05 39	A	00 13 W
28098	HD ~~143187~~ 136849	15 17.8	33 17	G40	IIaOb	13	21°F	05 59	06 12	B	02 [illegible]
~~28099~~	~~HD 133629~~	~~14 59.9~~	~~-25 24~~	~~G40~~	~~IIaOb~~	~~13~~				~~A~~	
~~28099~~	~~HD 134946~~	~~15 07.5~~	~~-23 38~~	~~G40~~	~~IIaOb~~	~~13~~				A	
			CLOSED UP			0620	—	CLOUDS			
28098F	Focus Test.					30/30		21°F		A	
[illegible]	[illegible]		[illegible]		plates # [illegible]64-6						
					[illegible] # 28087-98F						

Dome Temp. .... **Transparency Conditions** ... GOOD

Focus ....

Dome Temp. .... WINDY

02 WEST — THIN CLOUD FROM WEST

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible] 20	8	01 39W	37 24	2-3	6.04	B9	9-9	B8-B9 Clouds moving in	guiding weak
[illegible]	[illegible]	1 46W	+04 28	2	6.28	B8	9-9	"	guiding
[illegible]	[illegible]	1 58W	+66 52	1	6.10	B8	9-9	"	fine
[illegible]	[illegible]	1 41W	+74 28	1-2	6.36	B9	9-9	"	fine
[illegible]	[illegible]	0 40W	+65 19	0-1	6.22	B9	9-9	"	fine
[illegible]	[illegible]	0 58W	57 24	1	5.77	B9	9-9	"	guiding
04 [illegible]	[illegible]	01 07W	-27 04	0-1	5.64	B8	9-9	" (d+e) [illegible]	[illegible]
4 [illegible]	[illegible]	0 22W	-22 00	0-1	5.25	B8	9-9	" (d+e)	fine
[illegible]	[illegible]	00 03 E	+38 42	0-1	6.3	F9	9-9	another [illegible]	fine
[illegible]	[illegible]	00 13 W	+62 35	0-1	6.09	B9	9-9	B8-B9 (d+e)	guiding
[illegible]	[illegible]	02 40 E	+33 05	0-1	5.34	B9	9-9	" (d+e) CLOUDS	guiding
					~~7.1~~	~~B8~~		"	
					~~6.6~~	~~B9~~		"	[illegible]

— EXP. MTR NOT FUNCTIONING.

— CROSSHAIR ILLUM. ON VISITORS' EYEPIECE WOULD BE HELPFUL.

Date 23 JAN/65 Observer Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
	~~HD 23258~~										
28098 F_2	focus test	in · in/out · out		6x40 ~~[illegible]~~	IIa0p		24°F			<	focus set [illegible]

Dome Temp.

Focus

Dome Temp.

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions ....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
								2 { 6 x 0 5 0 { 6x 9 7	
								DOME APPARENTLY FROZEN -	
<		focus set at 50.5					30/30	WILL NOT TURN	sl centre to red

Date ~~28/29~~ JAN /63 – THURS - FRI **Observer** ~~B SK~~ – Hb Cw Me se **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
28099	φ PERS HD 10 516	01 37.4	+50 11	G10	IIaOb	9xL	10°F	18h 43m30	19 42	A	2 15
~~28100~~	~~HD 36665~~										
28099 F,	focus test in...in/out ~~on~~ G40				IIa Ob		7°F			A	
28100	BD 59°612	3 07.3	59 33	G40	IIa Ob	17	7°F	20 03 60	22 03	B	02 55 W
28101	HD 36665	5 28.3	+27 59	G40	IIa Ob	17	3°F	22 20 31	23 22	C	02 00 W
28102	HD 38708	5 42.6	29 06	G40	IIa Ob	17	2°F	23 27 29	00 25	B	02 54 W
28103	HD 55439	07 07.8	-09 40	G40	IIa Ob	17	2°F	00 36 37	01 49	A	2 54 W
28104	HD 66684	07 59.6	+27 49	G40	IIa Ob	13	0°F	01 59 14	02 26	C	2 39 W
~~28105~~	~~HD 68099~~	~~08 03.9~~	~~+10 07~~	~~G40~~	~~IIaOb~~	~~13~~	~~0°F~~	02 39	02 41	B	
~~28106~~	~~HD 94604~~ HR 3470	~~08 39.8~~	~~+67 05~~	~~G40~~	~~IIaOb~~	~~13~~ →					
28104 F	Focus TEST			G40	IIaOb						

→ This plate was begun as # 28105. The star spectrum is not likely to show up

25104 T — Calibration Step Wedge

Dome Temp. 11 °F

Focus

Dome Temp.

windy (NW)

Transparency Conditions excellent

0245 CLOUDS!!

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible] 42	A	2 15 w	50 33	0-1	3.95	B op	5-5-5	SPEC. FOR G 10 ~~DEVELOPED~~ #6 (39) {6502 6532}	
	A	~~Focus 48~~					30/30	~~DEVELOPED~~	V. cl. [illegible]
[illegible]	B	03 05W	59 47	0-1	9.33	B IV pr [illegible]	6-6-6	Cr BC PROG Field [illegible]. Had trouble centering ~~[illegible]~~ #9 (30) {6533 6563}	[illegible]
[illegible]	C	02 04W	+28 03	0	8.40	B [illegible] (III-[illegible])	6-6-6	" "Focus 47 Had trouble turning dome. #9 {6563 6593}	[illegible]
[illegible] 25	B	02 54 w	59 08	0	8.25	B3 [illegible]	6-6-6	[illegible] " #9 {6594 6626}	[illegible]
[illegible]	A	2 54 w	-9 46	0	8.58	B3 e [illegible]	6-6-6	" " too far west #9 {6628 ~~66~~ 6641}	[illegible]
[illegible] 26	C	2 39 w	+27 39	0	6.14	B9	9-9	B8 - B9 focus 46 #6 (2) {6642 6644}	
~~[illegible]~~	B		~~+9 57~~	~~1~~	~~6.05~~	~~B9~~	~~6-~~	~~" THICK CLOUDS! #6 (1) {6645 6647}~~	

29/30

weak [illegible] [illegible] [illegible] [illegible] [illegible]

-rechargable flashlight in warming [illegible]

-UPPER BUTTON (W) FOR DOME TURNING, MAKING POOR CONTACT

-DOME DIFFICULT TO TURN - CABLE SLIPPING EAST ??

-VISITORS' EYEPIECE ILLUM..? (LAMP APPEARS OK)

PH A&C LOADED IN N. PIER

Date 29/30 JAN/65 FRI/SAT **Observer** Fl MCL - Mt **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28105	HD 10516 φ Per	1h 37.m4	+50° 11′	G 10	IIaOb	9	5°F	18h 51m	19h 21m	A
356 T 1	HD 23180	03h 42.m0	+32° 10′		T=10			19 50	20h 19m	
356 T 2	ε Tau	04h 26.m5	+19° 06′		T=10			20 28	21 00	
356 T 3	HD 23180	03h 42.0	+32° 10′		T=10			21 09	21 20	
356 T 4	ε Tau	04h 26.5	+19° 06′		T=10			21 33	21 47	
356 T 5	HD 23180	03h 42.0	+32° 10′		T=10			21 58	22 11	
356 T 6	ε Tau							22 21	22 38	
356 T 7	HD 23180							23 55	23 07	
356 T 8	ε Tau						2°F	23 17	23 44	
356 T 9	ε Tau							23 52	00 02	
356 T 10	HD 23180				T=10		1°F	00 10	00 20	
								~~01 53~~		
~~28105~~	~~BD +45° 1859~~	10h 38.m3	+45° 12′	G 40	IIaOb	13	-1°F	01 53	04 42	C
29106	HD 114762	13 07.5	+18 02	"	"	"	-3°	04 55	05 56	A
29106 F	FOCUS TEST			"	"					

Dome Temp. + 7° F

Focus ....

Dome Temp. 0° Focus 46

Transparency Conditions Good   Clouds on Southern Horizon

Soo ?? Good.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
19 21	A	1h 58m W	+ 50° 31′	0	3.95	B0p	5-5-5	Special G10 Corrector not used	guiding?
20 9		0 26 W	0h 56 W	0	3.82	B1 III			
21 00		21 W	0h 7m W	0+	3.54	K0 III			
21 20		1h 46 W	1h 57m W	0+	3.82	B1 III			
21 49		1h 25 W	1h 42 W	0					
22 11		2 36 W	2 48 W	0					
22 38		2 14 W	2 31						
23 17		3h 33m W	3 45	0+					
23 14		3 10 W	3 37	0+					
18 02		3 45	3 56	0+					
00 20		~~4 04~~ 4 48	4 58	0+					
[illegible]	C	2h 20m W	+ 44° 52′	0+	9.59	F4	6-6-6	~~KAFS Binary~~ #9 6652 ~~3393~~	[illegible]
[illegible]	H	1h 08 W	+ 17 43	0+	8.2	F7	6-6-6 30/30	Std Velocity accidentally uncapped #9 {6583 5728}	[illegible]

Date 30/31 Jan '65 Sat/Sun **Observer** Hb ✓ **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28107F	Focus Test			G40	IIaOb	13	60F	—		B
28107	HR 1221 HD 24769	03 57.2	+22 54	G40	IIaOb	13	6°F	18h 36 (9)	18 44.5	A
28108	HR 1234 HD 25152	03 54.7	+36 44	G40	IIaOb	13	60F	18 54 (8)	19 10	B
28109	HR 1328 HD 27026	04 11.2	+41 54	G40	IIaOb	13	50F	19 18 (11)	19 40	A
28110	HR 1371 HD 27650	04 16.6	+42 12	G40	IIaOb	13	5°	19 45 (9)	20 02	C
28111	HR 1377 HD 27772	04 18.0	+33 54	G40	IIaOb	13	5°F	20 08 (12)	20 31	A
~~28112~~	~~HR 1424 HD 28503~~	~~04 24.6~~	~~+39 48~~							
28112	HR 1512 HD 30122	04 39.7	+23 27	G40	IIaOb	13	5F	20 41 (18)	21 17	B
28113	HR 1442 HD 28217	04 [illegible]	+7 48	G40	IIaOb	13	5°F	21 23 (12)	21 46	C
28114	HR 1576 HD 31373	04 52.2	+19 54	G40	IIaOb	13	4°F	21 51 (6)	22 03	A
28115	HR [illegible] HD [illegible]	[illegible]	[illegible]	G40	IIaOb	13	4°F	22h 09m (11)	22 31	C
28116	HR 1442 HD 28217	04 22.0	+10 59	G40	IIaOb	13	4°F	22 37 (22)	23 20	B
28117										

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. 6°F (?)

Focus 47.5

Dome Temp.

Transparency Conditions fair (light As in south) scattered Ci

2030: completely overcast with light cloud.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	B						30/30		[illegible]
[illegible]	A	00 48E	+23°07'	1	5.86	B9	6-6-6	B8-B9 seqs 6 {67[illegible]	fine
[illegible]	B	00 26E	+36 55'	1	6.31	B9	6-6-6	" " {6734 6736	fine
[illegible]	A	00 [illegible]E	+42 06	1	6.07	B8	6-6-6	" CLOUDS INTERFERING " {6737 6738	good
[illegible]	C	00 [illegible]W	+42 23	0	5.96	B9	6-6-6	" HELD UP BY CLOUDS // MAY BE MARKED "1" " {67[illegible] 67[illegible]	fine
[illegible]	A	00 32W	+34 05'	0-1	5.53	B8	6-6-6	" " MARKED "2 8111" {6742 6744	fine
					6.21	B8		Close Double Star! – approx. same magnitude and colour – separated by length of slit.	fine
[illegible]	B	00 56W	+23 35'	0	6.12	B8	6-6-6	B8-B9 seris 6 {6744 6746	fine
[illegible]	C	01 38W	+17 52	0-1	6.19	B8	6-6-6	Close double [illegible] 3" [illegible] {6746 6748	fine
[illegible]	A	01 32W	+14°58'	0-1	5.69	B8	6-6-6	" [illegible] 6 {67[illegible]	fine
[illegible]	C	01 57W	+14 29	0-1	5.[illegible]	B8	6-6-6	" seris 6 {6750 675[illegible]	fine
[illegible]	B	03 13W	+11° 11'	0	5.7[illegible]	B8	6-6-6	" [illegible] seris 6 {6752 6754	fine

SNOW Closed up 2330

PH A, B and C loaded on North pier

Dome Temp.
Focus
Dome Temp.

Date 31 Jan/65 **Observer** Hd Mal [illegible] **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
28116 F_1	focus test in·in/out·out			G 40	II a Ob	13	17°F			A	focus [illegible]
28116 F_2	focus test in·in/out·out			G 10	II a Ob	9	17°F			A	
	~~[illegible] should be regapped~~										
28117	φ PER HD 10516	01 37.4	50 11	G 10	II a Ob	9 XL	17°F	18 15	31 19 17	A	W 1h 01 [illegible]
~~28118~~				G 40	II a Ob	13				B	
											-19: [illegible]
28118	HD 22484	03 31.8	+00 05	G 40	II a Ob	13	17°F	20 14	2 20 18	B	01 19 W
28119	HD 27742	04 17.6	+20 45	G 40	II a Ob	13	17°F	20 24	6 20 35	C	00 40 W
28120	HD 50896	06 50.0	-23 48	G 40	II a Ob	13	16°F	20 45	20 21 25	A	E 1h [illegible]
28121	HD 47088	06 34.5	+06 06	G 40	II a Ob	13	15°F	21 36	19 22 14	C	[illegible]
28122	HD 47984	06 38.8	+6 10	G 40	"	13	12°F	22 23	29 23 20	F	01 05 W
28122 T_1	Calibrate Step Wedge for plates # 28106 - # 28107										-23: [illegible]
28122 T_2	" " " " " # 28107F - 15, # 28118 - 22										[illegible]

Dome Temp. 27°F (afternoon)
20°F (eve)
Focus ....
Dome Temp. ....

Transparency Conditions ....

Ending Time E.S.T.	P.I.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	A	focus setting 49					30/30	sl. centre to violet in violet.	
	A						30/30	sl. centre to red.	
19 17	A	W 2h 01	50 29	1	3.95	B0p	5-6-	special For G10 clouds darning up #6 (30) {6756 6786	fine.
	3								
		-19:30 - clear but snow falling - closed temporarily							
20 18	3	01 09 W	+00 18	0	5.2	F9	18	Std. vel. 6 (2) {6786 6788	fine
20 35	C	00 40 W	+20 54	0	5.87	B8	9-9	B8-B9 6 {6789 6791	fine.
	A	E 1h 01	-23 53	0	6.6	WR	6-6-6	W.R FOR SK 7 {6792 6794	fine
	3	W 6m	+6 05	0	7.3	OB	6-6-6	I MON - SK clouds. 7 (4) {6795 6798	look
	A	01 05 W	+6 09	0	7.2	A2Ib	6-6-6	" " STAR NO. 2 ON SLIT clouds. SEE ON SLIT 7 {6800 6802.3	fine.
		-23:30 closed ~~temporarily~~							
22		0100 Snowfall.							

PH B (G40) loaded.

Date 2-3, Feb., 1965 Tue-Wed **Observer** Fl, Mse; Mt Nse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.F	Hour Angle End
		h m	° ′								
28123	ψ Per HD 10516	01 37.4	+50 11	G10	IIaOb	.9×4	17°F	18h 10m (26)	19 02	A	1h 55m W
											12 in
28124	HD 63112	07 42.1	−12 26	G40	IIaOb	13	12°F	23 46 (22)	00 30	B	1 30 W
28125	HD 66684	07 59.6	+27 49	G40	IIaOb	13	9°F	00 38 (14)	01 05	A	1 37 W
28125 F1	focus test in in out out			"	"	"	"			C	
28125 T	Calibration Step Wedge.										

Dome Temp. 16° F

Focus

Dome Temp. 8°

Transparency Conditions Some clouds in south (1800)
moderate sw wind

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
19 02	A	1ʰ 55ᵐ W	50 31	0⁻	3.95	B0p	6-12	Special For G10 CLOUDS sens (30) {6805, 6813, ~~6833~~} Snow Flurries Closed up quickly!! 19:07	weak
		12° in spectrograph - change focus to 48							
0 30	B	1 30 W	-12 34	0⁻⁻	6.37	B9	9-9	B8-B9 #6 (2) {6817, 6819}	fair
05	A	1 37 W	+27 39	0⁻	6.14	B9	9-9	B8-B9 (focus 47.8) clouds #6 (2) {6819, ~~6827~~, 6820.3}	fair
	C			closed 01 15			30/30		plate

Dome Temp.
Focus
Dome Temp.

Date 3-4 Feb/65 Wed-Thurs **Observer** L - Rc Mse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
28126	φ Per HD 10516	01 37.4	50 11	G 10	IIaOb	9×2	10°F	18 13	19 18 50	A	1:46 W
28127	HD 36665	05 28.3	+27 59	G40	IIaOb	17	8°F	19 18	52 20 10	B	0 45 E
28128	BD +37° 1292	05 35.9	37 56	"	"	17	8°F	20 20	124 22 28	C	1 26 W
28129	HD 61554	07 34.7	-18 27	G40	IIaOb	13		23 03	22 23 47	A	0 48 W
28130	HD 36881	05 29.7	+10 10	G40	IIaOb	13		23 52	9 00 10	C	3 15 W
28131	HD 40724	05 55.6	+22 24	G40	IIaOb	13	3°F	00 19	9 00 26	B	3 16 W
28132	HD 51688	06 53.3	+26 03	G40	IIaOb	13	2°F	00 46	7 01 00	A	2 [illegible]
28133	HD 92588	10 36.3	-01 13	G40	IIaOb	13	2°F	01 26	28 02 14	C	0 [illegible]
28134	HD 10[illegible]	11 47.2	+28 26	G40	IIaOb	13	2°F	02 42	18 03 17	[illegible]	0 05 W
28135	HD 107328	12 [illegible]	[illegible] 53	G40	IIaOb	13	2°F	3 27	9 3 45	C	0 07 W
28136	HD 107348	12 15.4	-21 39	G40	IIaOb	13	2°F	3 52	11 4 14	A	0 35 W
28137	HD 115612	13 13.2	68 56	G40	IIaOb	13	2°F	4 23	9 4 40	C	0 05 W
28138	HD 136849	15 17.8	33 17	G40	IIaOb	13	2°F	4 51	4 4 59	A	1 41 E
28139	HD 13[illegible]	14 5[illegible]	-25 24	G40	IIaOb	13	2°F	5 06	29 6 04	C	0 19 E
28139 F.	focus test - in in/out out			G40	IIaOb	13				A	
28139 T	Calibration Step Wedge - for plates					28126	-39 F.				

Dome Temp. 12°F

Transparency Conditions ~~very~~ excellent – windy

Focus

Dome Temp.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
8 50	A	1:46 w	50 31	1	3.95	Bop	6-6-6	Special for G10 #6 (30) {6821 6851	fine
20 10	B	0 45E	+28 03	1	8.40	B1e (III-V)	6-6-6	Cn-Be (focus setting 47.5) (field drawn) #9 (30) {6852 6882	fine
22 28	C	1 26 W	37 58	1	9.28	B3V pe	6-6-6	" " " windy! #9 30 {6884 6914	fine
23 47	A	0 48 w	-18 34	0	6.42	B9	9-9	B8-B9 #6 (2) {6916 6917.5	fine
0 10	C	3 15 w	+10 15	0	5.54	B8	9-9	B8-B9 #6 (2) {6919 6921	fine
[illegible]	B	3 16 w	+22 26	0-1	6.23	B8	9-9	B8-B9 (focus setting 46.5) #6 (2) {6922 6924	fine
[illegible]	A	2 42 W	+25 59	0-1	6.27	B9	9-9	B8-B9 (field drawn) #6 (2) {6925 6927	fine
[illegible]	C	0 14 W	-1 33	0	7.4	K.1	9-9	Std vel (cirrus cloud) #7 {6928 6936	fine
3 17		0 05 w	+37 [illegible]	1	7.3	G5	9-9	STD Vel " in south #7 {[illegible]	fine
[illegible]		0 07 w	+3 31	1	[illegible]	[illegible]	9-9	std vel " also n + nnw [illegible] 50	fine
[illegible]	A	0 35 w	-22 00	0	5.25	B8	9-9	B8-B9 (d+e) #6 {6951 6953	fine
[illegible]	C	0 05 w	68 35	0-1	6.09	B9	9-9	B8-B9 (d+e) #6 {6954 6956	fine
[illegible] 59	A	1 41 E	33 04	0-1	5.34	B9	9-9	B8-B9 (d+e) #6 {6957 6959 a little fogged	fine guiding
[illegible] 34		0 19 E	-25 37	0	7.1	B8	9-4.5	B8-B9 #7 {[illegible]	fine but fogged.
	A	C to violet – rather much!					30/30	upper button for dome turning makes poor contact	

Focus was poor thro'out night, I think PH A (G10) loaded in drkrm

PH A ([illegible]) + ~~PH B A & C ([illegible]) & DAJEL~~

137

Date 4-5 Feb /65 Thurs-Fri **Observer** Cn · Hb Msu **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
							10°F	(dome)			
28139 F_2	focus test	in · in	out out	G40	IIaOb	13	7°F			A	
28139 F_3	focus test	" "		"	"	13	"			A	
28139 F_4	focus test	"		"	"	13	"			A	
28140	HD 38708	05 42.6	+29 06	G40	IIaOb	17	7°F	20 00	16 20 32	A	00 32E
28141	BD+05° 1291	06 27.6	+05 52	G40	IIaOb	17	7°F	20 38	36 21 50	C	00 01W
28142	58978	07 22.8	-22 53	G40	IIaOb	13		22 28	39 23 42	B	00 39W
~~28143~~	[illegible]						3°F				
28143	HD 81797	09 22.7	-08 14	G40	IIaOb	13	3°F	23 55	0 00 07	A	00 41E
28143 F_1	focus test	in · in	out · out	G40	IIaOb	13	3°F			A	
28144	HD 82327	9 26.2	74 47	G40	IIaOb	13	2°F	00 28	27 1 21	B	0 32W
28144 T	Calibration step wedge for plates # 28140 - 44										
~~28144 F_1~~	~~focus test~~										

28.

Dome Temp. ....
Focus ....
Dome Temp. ....

Transparency Conditions Clouds: 18h – 20h
21:45 very light cloud from N & W.
21:50 l. cloud over entire sky.
0110 2–3 mag. absorption and getting worse.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	A						30/30	focus setting 47	c to violet
	A						30/30	" " 45	[illegible]
	A						30/30	" " 47	c to violet
[illegible]	A	00 32E	+29 08	0	8.25	B3pe	6-6-6	Cn-Be (focus setting 45.0) #9 {6969 6999	poor good
[illegible]	C	00 01 W	+05 51	0	9.72	B0pe	6-6-6	Cn-Be 21:45 light cloud ... #9 {7002 7023	l. weak.
[illegible]	B	00 59W	-23 00	0–	5.25	B0IVpe	6-6-6	Cn Be disappeared ~23:40 " general #9 {7026 7049	l. weak.
								focus setting 44.2 acc. to new graph	
[illegible]	A	00 41E	-08 29	0– –	2.2	K5	9-9	std. Vel. cloud. #7 (8) {7050 7052	.5 weak
	A						30/30		c to vi
[illegible]	B	0 32W	-74 32	0–	6.36	B9	18	B8-B9 general light cloud #7 {7053 7055	.9

PH A, B, C loaded.
- no 64O plates in dome

Date 5 Feb /65 **Observer** **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28144 F1	focus test	in-in /	out-out	G40	IIa 0b	13	17°F			A
28144 F2	focus test	"	"	G40	"	"	30°F	(7 Feb)	dome temp 37°F	A
F3	"	"	"	"	"	"	"	"		"
F4	"	"	"	"	"	"	30°F			A

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. 24°F

Transparency Conditions ....

Focus ....

Dome Temp. ....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	A						30/30	focus setting 46.8	[illegible]
								PH A, B, C loaded, unexp. plates + exp. pl. box in [illegible]	
	A						30/30	forgot to change focus – 46.8	c [illegible] bad!
							"	focus setting 49.3	c [illegible]
							50/50	focus setting 51 (2 [illegible]) emulsion affected by humidity??	[illegible]

141

R~ Mse

Date 8-9 Feb/65 Mon-Tues **Observer** B Hr **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
~~28145~~	~~φ PERS HD 10516~~	~~01 37.4~~	~~+50 11~~	~~G40~~	~~IIa O6~~	~~9~~				A
357-3173	ζ^2 Cet	02263	+0818		5/5/3	28		1835		
28144 F5	focus test in in/out out			G40	IIa O6	13	28°F			A
" F6	"	"		"	"	"	"			B.
28145	HD 47107	06 34.5	+05 50.7	"	"	"	"	20 37	21 17	C
~~28146~~	~~HD 49477~~	~~06 ?2.5~~	~~+01 37.3~~	~~"~~	~~"~~	~~"~~	26°F			~~A~~
28146	HD 43362	06 10.7	-09 00	"	"	"	"	21 59	22 21	A
28147	HD 48616	06 41.8	+3 12.	"	"	"	26°F	22 31	23 31	B
28148	HD 53744	07 1.1	+28 21	"	"	"	25°F	23 40	00 00	C
28149	HD 53929	07 1.8	+05 04	"	"	"		0 5	0 15	A
28150	HD 57608	07 16.9	+0 22	"	"	"		0 31	00 47	B
28151	HD 92588	10 36.3	-01 13	"	"	"	24°F	01 00	02 00	C
28152	" 103095	11 47.2	38 26	"	"	"		0224	03 02	A

OVER

Dome Temp. 33 °F

Transparency Conditions Fair

0140 HAZE

Focus ....

~~Spectrograph~~ **Dome Temp.** 29 °F

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	A	—		—	~~3.95~~	~~Bop~~		~~Special for G.O. #6~~ {(30)	
		1h 14m		4.3	B9 ##			GxTST. very close to way	
	A	1					30/30	Electronic Malfunction	
	B.						"	focus setting 49.0 WRONG LINE ON GRAPH [illegible]	c to r [illegible]
17	C	0 . 20 E	+5 50	0-1	7.7	OB	6-6-6	" " 50.4 / I MON field drawn (SK) #8 (1") ~~(30)~~ 30 (exp mtr very difficult to balance)	c to [illegible] poor guiding
	A				~~8.8~~	~~OB~~		I MON – finder field in no way resembles diag	
1	A	1 06 W	-9 00	0	6.01	B9	9-9	B8-B9 no mtr	fine
31	B	1 47 W	+3 10	0	7.6	F6 I B	6-6-6	I MON field drawn " "	fine
30	C	1 53 W	+28 14	0	6.21	B9	6-6-6	B8-B9 " "	fine
15	A	2 08 W	+4 58	0-1	5.90	B8	6-6-6	B8-B9 " "	fine
47	B	0226W		0-1	5.95	B8	6-6-6	B8-B9 " "	fine
00	C	0020W	-01 34	0	7.4	K1	6-6-6	STD. V.1	fine
02	A	0 11 W	38 00	0	7.3	G5	6-6-6	" " #8 (1") 7307 7322	fine

PORCELAIN CRACKED

δ South bushing EAST of pier STICKS!!!

Date 9 Feb /65 (cont'd) **Observer** Hr Mse (?) **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
28152 F,	focus test in in/out out			G40	IIaOb	13	22°F			B	
28153	HD 93427	10 42.1	65 40	G40	IIaOb	13	22°F	03 47	03 39	C	1 46 w
28154	HD 107348	12 15.4	-21 39	G40	IIaOb	13	22°F	03 46	04 00	A	0 46 w
28155	HD 115612	13 13.2	68 56	G40	IIaOb	13	21°F	04 12	04 24	B	0 07 w
28156	HD 114762	13 07.5	+18 02	G40	IIaOb	13	21°F	04 32	05 40	C	01 29 w
28156 T	Calibration Step Wedge										
28156 F,	focus test in in/out out			G40	IIaOb	13	21°F			B	dome T
28156 F2	" "	"		"	"	"	37°F			"	

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions 0500 Poor (Haze + Cloud)

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	B						30/30	focus setting (49.9) — SET 49.9 54 IN STAKE; GRATH CALLED FOR 48.9	OK
3 39	C	1 46 w	65 21	0	6.22	B9	6-6-6	B8-B9 #7 (4) {7324 7328	guiding
4 50	A	0: 46 w	-21 59	0	5.25	B8	6-6-6	B8-B9 #7 (4) {7329 7333	fine
4 24	B	0 07 w	68 36	0	6.09	B9	6-6-6	B8-B9 #7 (4) {7334 7338	fine
5 [illegible]	C	01 29 W	+17 43	0-1	8.2	F7	6-6-6	std. vel. #9 (45) {7339 7384	fine

0600 Clouds Closed.

GHO P.H. A & C Tested.

	B	dome temp 27°F					50/50	focus setting 49.9 (0.9 div)	OK
	"	" " 43°F (10 Feb/65)					" "	" " " 54	[illegible]

Date 13/14 Feb '65 Sat/Sun **Observer** Hb – Fl, McL **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
28157 F	focus test		min/print	G40	IIaOb	13	°F	set	48.5′	A
~~28157~~	~~HR 1769 HD 35104~~	~~05h 17.2m~~	~~−13 51~~	G40	IIaOb	"	18°F	20 06	20 46	B
28157	HR 1800 HD 35548	05h 20.4m	−00 38	G40	IIaOb	"	16°F	21 00	21 30 (15)	C
28158	HR 1806 HD 35640	05h 21.1m	−05 37	G40	IIaOb	13	16°F	21 33	22 03 (15)	B
28159	HR 1807 HD 35656	05h 21.0	+06 47	G40	IIaOb	13	15°F	22 07	22 37 (15)	A
28160	HR 2295 HD 44756	06 18.4	−04 39	G40	IIaOb	13	"	22 44	23 14 (15)	B
28162	HR 2656 HD 53240	06 59.2	−09 58	G40	IIaOb	13	14°F	23 19	23 49 (15)	C
28163	HR 2832 HD 58580	07 21.1	−04 20	G40	IIaOb	13	14°F	23 53	00 23	A
357 T 1	11 L Mi	09h 33.5	+35°59′			t = 10		01 25	01 35	
357 T 2	ρ Leo	10h 30.8	+09°20′			"		01 42	01 53	
357 T 3	# 36	10h 09.3	+49°39′			"		02 00	02 11	
357 T 4	γ UMa	11h 51.9	+53°54′			"	12°	02 20	02 39	
357 T 5	# 108	11 07.5	+44°42′			"		02 37	02 45	
357 T 6	# 109	11 16.5	+33°17′					02 50	03 01	
357 T 7	λ UMa	10h 14.9	+43°06′			"		03 10	03 23	
357 T 8	ρ Leo	10h 30.8	+09°20′			"	12°	03 21	03 35	

Dome Temp. 18°F (wind)

Focus 48.5

Dome Temp.

Transparency Conditions ~~good~~ scattered Cu

2030: EXCELLENT

MOON almost full

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	A						30/30	~~no center exp.~~	no center
[illegible]	B	~~00° 44m W~~	~~+13° 43′~~	~~0~~	~~6.42~~	B8	6-6-6	B8 = B9 exp. meter counting (?) too slowly — est. meter exposure (sens. 6) 5594 5555 (2)	no comp. out of focus
21 30	C	01 25 W	−00 34	0–1	6.23	B9	6-6-6	" sens 6 5786	fine
[illegible]	B	01 57 W	−05 33	0	8.11	B9	6-6-6	"	fine
[illegible]	A	02 30 W	+06 53	0	6.37	B9	6-6-6	"	fine
[illegible]	B	02 11 W	−04 40	0	6.40	B9	6-6-6	" finder field	guiding
[illegible]	C	02 05 W	−10 03	0	6.37	B9	6-6-6	" " "	fine
[illegible]	A	02 17 W	−04 26	0	6.45	B9	6-6-6	" Re: Exp. Met. [illegible] (EL)	guiding & weak
[illegible]		1h 10 W	1h 20m W	1	5.41	G8 II-III			
[illegible]		0 30 W	0h 41 W	1	3.85	B1 Ib			
[illegible]		01 10 W	01h 20 W		6.95	dM0			
[illegible]		0 13 E	0h 04 E		2.44	A0 V			
[illegible]		0 47 W	0h 36 W		3.01	K1 III			
[illegible]		0 53 W	1h 03 W		3.48	K3 III			
[illegible]		2 14 W	2h 22 W		3.95	A2 IV			
[illegible]		2 14 W	2h 23 W					Clouded over.	

147

Date Sun Feb 14-15/65 Observer Hd - HS Mse Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I
28164 [3]	φ Pers HD10516	01 37.4	50 11'	G10	IIa0b	9×L	(rack) 18°	18 25 [12]	18 49	A
28165 [4] F1	Focus test			G10	"	"	18°	In-in / out-out		7
28165 [4]	φ PERS					9×L	"	18 52 [17]	19 25	A
28165 [4] F2	focus test in-in / out out			G40	IIa0b	13	19°F			A
28166 [5]	BD 37° 1292	5 35.9	+37 56	G40	"	"	19°F	19 56 [34]	21 04	B
28167 [6]	BD 25° 970	5 40.2	+25 30	G40	IIa0b	13	19°F	21 19 [29]	22 17	C
28168 [7]	HD 65583	07 54.3	+29 31	G40	IIa0b	13	19°F	22 25 [9]	22 43	A
28169 [8]	+5° 1451	(1950) 06 49.8	(1950) +5 13	G40	IIa0b	13	19°F	23 59 [21]	00 41	B
28170 [9]	BD +45° 1859	10 38.3	45 22	G40	IIa0b	13	18°F	01 20 [127]	05 34	C
28171 [0]	HD 123782	14 04.6	49 56	"	"	"	17°F	05 41 [4]	[illegible]	A
28172 [1]	HD 144579	16 01.5	+39 20	G40	IIa0b	13	17°F	05 57 [8]	06 12	B
28171 T	Calibration Step Wedge				for plates		#28164 F2 - 28171			

Dome Temp.

Focus

Dome Temp.

Hour Angle End

Dome Temp. 25° F

Transparency Conditions full moon very good

Focus

some cloud in w – 0400

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W 2h 29	50 30	2	3.95	B9p	6-6-6 30/30	Hd Prog (plate broken) #6 (30) {7398 / 7428	[illegible]
W 3 05	"	2	3.95	B9p	6-6-6 30/30	dome temp 22° [difficult to [illegible] esp [illegible]] 6 (30) {7424 / 7459 focus setting 4 9.0	fine
W 45m	42 01	2	9.28	B3[illegible]	8-8-8	dome temp 24 CW Be (finder field) #9 (30) {7462 / 7490	[illegible]
W 1h 55	+25 32	2	8.63	B3ne	8-8-8	dome temp 23 Cn-Be (finder field) slow [illegible] count! #9 (30) {7491 / 7511 ← counts [illegible] may be wrong star broken plate	good
W 6m	+29 19	1	7.9	G7	8-8-8	Std Vel short plate; may be no good #8 (45) {7514 / 7526	fine
W 3 14	+5 12	1	9.5	OB	8-8-8	I mon (finder field) #9 (30) {7526 / 7556	good
0415 W	44 51	1	9.59	F4	8-8-8	KAFS #9 (45) {7582 / 7607	
0105 W	49 37	1+	6.8	M2	10-10	Std Vel. #7 {7610 / 7618	[illegible]
E 0 28	39 13	1	7.2	G8	10-10	" " #7 6 {7619 / 7625	[illegible]

RH A, B & C loaded

149

Date Feb 16/17 1965 Tues - Wed **Observer** Cm (Mt) Msc **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28171 F,	focus test in-in/out-out			G40	IIaOb	13	24°F			A
28172	HR 1328 HD 27026	04 11.2	+41 54	G40	IIaOb	13	24°F	18 30	11 18 52	B
28173	HD 31964	04 54.8	43 40	G10	IIaOb	9	22°F	18 58	25 19 44	B
28174	BD 25° 970	05 40.2	+25 30	G40	IIaOb	17	24°F	19 54	54 21 42	B
28175	HD 41335	05 59.4	-06 42	G40	IIaOb	13	19°F	21 47	5 21 57	C
28176	HD 44458	06 16.8	-11 44	G40	IIaOb	13	"	22 01	8 22 17	B
28177	HD 49787	06 45.0	-5 24	G40	IIaOb	13	"	22 20	26 23 12	C
28177 F	Focus Test			G40	IIaOb	13				B
28177 T	Calibration Step Wedge				for plates # 28172 - 77 F,					

Dome Temp. 28° F

Focus

Dome Temp.

Transparency Conditions cloud in south at beginning
- same haze
- 19:30 ~ full moon rising covering some cloud in east.
20h - clear
21h - haze over entire sky

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
					30/30	focus setting 49.9	c. sl to r
00 06 W	42 04	0	6.07	B8	8-8-8	B8-B9 #6[(2)] {7631, 7633}	[illegible]
00 14 W	43 47	5"	3.3-4.1	F? p	6-6-6	dome temp 24°F Fl- supergiants #4[23] {7634, 7657}	[illegible]
W1 27	25 32	0	8.63	B3ne	8-8-8	(focus setting 51) Cn-Be #9[(8?)] {7658, 7681}	[illegible]
W1 24	-06 42	0	5.13	B2ne	8-8-8	Cn Be " #6[(2)] {7681, 7683}	[illegible]
W1 27	-11 45	0	5.62	B2pe	12-12	Cn Be " #6[(2)] {7684, 7686}	[illegible]
01 54 W	-05 29	0	7.49	B2pe	8-9-8	" 22:40 4 cloud. #8[10] {7686}	[illegible]
					30/30	focus 51	[illegible]
						00:30 closed up	

Date Feb 17/18/65 Wed Thurs Observer Mse Hb Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28178	Jupiter	03 05.3	+16 32.8	G10	IIa O	9	24	19 16	15 1946	B	W2[illegible]
28179	Alcyone η Tau	(1960) 03h 45m.1	(1900) +23° 59′	G40	IIa O	13	"	19 33½	1954	A	W1 43
28179F	" Focus Test			"	"	"	24°F	in in	out out	B	
28179T	" Calibration Step Wedge				for plate 28179						

Dome Temp. 29°F

Focus

Dome Temp.

Transparency Conditions *fair - poor*

Ending Time E.S.T.	P.E.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	P	W 2:14	+16 32				6-6-6	Very hazy. #4 (50) {7702 / 7770	[illegible]
[illegible]	4	W 1 43	+24 00	1	2.77	37III	18	Cn #4 {7771 / 7772	[illegible]
							50/30	focus setting 51	OK
								(D19)	

pH A&C loaded in N pier

Date 18-19 Feb/65 Thurs-Fri **Observer** C Pyse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28180	HD 23383 HR 1147	03 39.7	55 37	G40	IIa.O6	13	20°F	18 37 9	18 54	A	W 0:46
~~28181~~	~~HD 23552~~	~~03 41.0~~	~~50 26~~	~~G40~~	~~IIa.O6~~	~~13~~					
28180 F₁	focus test in input out			"		"	"			C	
28180 T	Calibration Step Wedge			– for plates		28180 - 28180 F₁					

Dome Temp.
Focus
Dome Temp.

Dome Temp. 24°F

Focus

Dome Temp.

Transparency Conditions fair - poor - some cloud

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
18 54	A	W 0:46	55° 49	0⁻	6.02	B9	8-8	B8-B9 focus setting ~49.3 clouds #6 {7777 / 7778.1	l[illegible]
					5.87	B8		#6 {	
	C						30/30		
								PH A, B, C loaded in [illegible]	

Date 19-20 Feb, Fri-Sat 1965 Observer Cw - Mt Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
~~28181~~	~~φ Per~~	~~01 37.4~~	~~+50 14~~	~~G10~~	~~IIaob~~	~~9~~					[illegible]
28181	HD 31964	04 54.8	+43 40	G 10	IIaob	9	7°F	19 20	[35] 20 30	A	[illegible] W
28181F	Focus test [illegible]			G40	IIaob	17	5°F			B	
28182	HD 31708	05 42.6	+29 06	G 40	IIaob	17	5°F	20 43	[36] 21 55	C	01 50 W
28183	HD 63462	07 43.9	-25 42	G 40	IIaob	17	4°F	22 02	[4] 22 10	A	00 06 W
28184	HD 58978	07 22.8	-22 53	G 40	IIaob	17	4°F	22 14	[8] 22 30	B	[illegible] W
28185	HD 55439	07 07.8	-09 40	G 40	IIaob	17	4°F	22 37	[18] 00 12	C	02 40 W
28186	BD +43° 1859	10 38.3	+45° 12′	G40	IIaob	17	4°F	00 30	[90] 03:30	A	02 31 W
28187	HD 114762	13 07.5	+1800	"	"	"	3°F	03 38	[33] 04 44	B	01 14 W
			Replaced Dec. motion fuse								
28188	HD 133529	14 59.7	-25 24	"	"	"	"	05:00	[25] 05:50	C	[illegible]

Dome Temp. 8°F

Focus

Dome Temp.

Transparency Conditions dark clouds in W windy

20:15 cloud from north.

02:20 some cloud about

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
Had just started when clouds came up & frost crystals started falling - so closed up p.d.q - cleared - opened up again									
[illegible]	[illegible]	01 12 W	+43 47	0-1	3.3-4.1	F5p	6-6-6	~~Fl Supergts~~ (30) #4 7785 7815	fine
							30/30	Focus 45	O.K.
[illegible]	[illegible]	01 50 W	+29 08	0	8.25	B3:p(e)	6-6-6	Cn Be occasional cloud #7 7815 7845	guiding
[illegible]	[illegible]	00 06 W		0	4.39	B0IV:pe	18	Cn Be #6 7846 [illegible]	fine.
[illegible]	[illegible]	00 45 W	-23 00	0	5.25	B0IV pe	18	Cn Be exp meter does not seem to stay balanced. [illegible] 7848 7850	fine.
[illegible]	[illegible]	02 40 W	-09 47	0	8.58	B3e[illegible]	6-6-6	Cn Be #9 7850 7874	luk.
[illegible]	[illegible]	02 31 W	+44 52	0	9.59	F4	6-6-6	KAFS BINARY very slow ~~exposure terminated~~ #9 7874 [illegible]	luk.
[illegible]	[illegible]	01 14 W	+17 41	0	9.2	F7	6-6-6	Std Vel. #8 7877 79[illegible]	fine.
[illegible]			~~-25 38~~						
[illegible]	[illegible]	00 [illegible]0 W	-25 38	0	7.1	B8	6-12	B8-B9 #7 7914 7918	luk

PH A loaded.

Date 21 Feb/65 Mon **Observer** H. Hyne (?) **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
~~28189~~	~~BD+29° 2495~~	~~14 02.6~~	~~+29 45~~	~~G40~~	~~IIaOb~~	~~13~~	~~15° F~~	~~0209~~		~~A~~	
28189	HD 114762	13 07.5	+18 02	G40	IIaOb	13	12° F	02 26	45 03 55	B	W0 34
28190	HD 131861	14 50.9	+45 43	G40	IIaOb	13	8° F	04 03	67 06 17	C	W1 1
28190T	Calibration Step wedge – for plates 28181F – 28190										

Dome Temp. 12° F

Focus

Dome Temp. +6° F

Transparency Conditions good

windy !! (NW)

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	A	—	+29 26		10.05	F8	S	KAFS ~~focus setting 47~~ finder field TOO FAINT	
3 55	B	W 0 34	+17 41	0	8.2	F7	8·8·8	Std Vel focus 47 #9 (45) {7934 7979	guiding
7	C	W 1:15	45 27	0-1	7.64	F3	8·8·8	KAFS necessary to use drive clamp ~~(finder field)~~ focus setting general haze #8 15 {7980 7995	fine
50									

(EXP PLATES IN UNEXP BOX #2.)

159 PH A & B loaded

Date 22-23 Feb/65 Mon - Tues **Observer** Rr - Hr (Mse) **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
~~28191~~	~~Hoto 516~~ φ Pers	~~01 37.4~~	~~50 11~~	~~G10~~	~~IIa0b~~	~~9×2~~	~~7°F~~			~~A~~	
28191	HD 54605	07 04.3	-26 14	G10	IIa 0b	9	"	19h 11m	20 25 01	A	E1 12-
28192	HD 46484	(1950) 06 31.3	(1950) 14° 42'	G40	IIa 0b	13	4°F	20 31	22 00 30	A	W01 12
~~28193~~	~~BD 45° 1753~~	~~09 36.7~~	~~45 30~~	~~G40~~	~~IIa 0b~~	~~13~~				~~B~~	
28192 F₁	focus test in in/out od			G40	"	13	2°F			B	
28192 T	Calibration Step Wedge - for plate #28192										

Clouds = Snow flurries at 0130 (hr)

Dome Temp. 8° F

Focus

Dome Temp.

Transparency Conditions

20 - 30 m/hr W winds

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	A		~~50 31~~		~~3.95~~	~~B0p~~		~~Hd Bvy~~ TOO WINDY ~~#(30)~~	
20 01	A	E1 12	-26 17	0	2.48	F8Ia	8-8-8	F1- supergiants #4 (23) {8028 8051}	fine
								[Trouble connecting capping device for short camera. OK now]	
22 30	A	W01 52	+4 31	1	8.1	B1V	8-8-8	I Mon focus 44 (fender flaked) #9 (45) {8052 8097}	fine
	E				~~9.87~~	~~A2V~~	—	~~KAFS ? focus 43~~ #9 (45) {8098 8143}	
	P						50/50	focus setting 43	OK
								23:30 : snow	

PH A&C (6x40) loaded

~~5"×7" plates in dome~~

161

Date 23-24 Feb/65 Tues-Wed **Observer** Hb Msc **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28193	HR 1297 HD 26571	04 07.0	+22 09	G40	IIaOb	13	12°F	18:58 [12]	1921	A
28194	HR 1471 HD 29365	04 32.4	+20 30	G40	IIaOb	13	13°F	19 27 [7]	1940	B
28195	HR 2504 HD 49229	06 42.3	−14 20	G40	IIaOb	13	13°F	19 47 [6]	1958	C
~~28196~~	~~HR 2932 HD 61224~~	~~07 33.1~~	~~−14 13~~	~~G40~~	~~IIaOb~~	~~13~~	~~11~~	~~20 03~~		~~B~~
28196	HR 1161 HD 235[illegible]	03 41.3	+56 49	G40	IIaOb	13	13°F	20 27 [26]	21 18	A
28196 T	Calibration Step Wedge — for plates 28193-96									

Dome Temp. /
Focus
Dome Temp.

Hour Angle End
[illegible]
[illegible]
[illegible]
[illegible]

Dome Temp. 18 °F

Focus ....

Dome Temp. ....

Transparency Conditions very poor
1920 – good
2015 – clouds from south
2100 – general haze ~1 mag or more

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
[illegible]	A	01 07 W	+22 19	0–1	6.11	B8	6-6-6	(wt. d+e) focus 46½ B8 - B9 several mag. absorption	#6 { 8173 8175	[illegible]
[illegible]	B	01 01 W	+20 38	1	5.71	B9	6-6-6	B8+B9 (d+e)	#6 { 8176 8178	[illegible]
[illegible]	C	00 49 E	−14 22	1	5.14	B8	6-6-6	B8+B9 (d+e) finder field drawn	#6 { ~~8179~~ 78 ~~8180~~ 80	[illegible]
~~—~~	~~B~~		~~−14 20~~	~~"~~	~~6.40~~	~~B9~~	~~6-~~	~~" (") (clouds from S.) 700 5(OK)~~	~~#6 { 8180 8181~~	
[illegible]	A	03 28 W	+57 02	0	6.46	B9	6-6-6	dome 14°F B8 - B9 FIRST ½ COUNT ON WRONG STAR finder field	#6 { 8181 81.82.5	[illegible]

PH B&C loaded in N pier

(25 Feb — 12" snowfall)

Date 28 Feb/65 Sun - Mon **Observer** Hd - Hr Mse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
28196 F.	focus test	in in/	out out	G40	IIa Ob	13	32°F			B	
28197	HD 24769	03 51.2	+22 54	G40	IIa Ob	13	32	18 43	8 18 59	C	W 1 25
28198	HD 25175	03 54.9	+17 00	"	"	"		19 05	8 19 21	A	W 1 39
28199	HD 26676	04 08.1	+09 58	G40	IIa Ob	13		19 25	9 19 42	B	W 1 47
28200	HD 27563	04 15.9	-07 50	G40	IIa Ob	13		19 46	10 20 05	C	W 2 03
28201	HD 29587	04 34.5	+41 57	G40	IIa Ob	13	30°F	20 12	30 21 12	A	[illegible]
28202	HD 47088	6 34.5 (1950)	+6 06 (1950)	"	"	"		21 20	17 21 54	B	W 1 36
28203	BD +29° 1907	9 24.6	+29 33	"	"	17	24F	22 07	78 00 43	C	W 1 32
28203 F.	focus test	in in/	out out	G40	IIa Ob	13	23°F	———	———	A	—
28204	BD +45° 1859	10 38.3	+45 12	G40	IIa Ob	17	"	01 13	55 03 03	B	[illegible]
28205	BD +29° 2495	14 07.6	+29 45	G40	IIa Ob	17	"	03 20	85 06 09	C	W 2 16
28205 T	Calibration Step Wedge				for plates		28196F	- 28205			

Dome Temp. 32°F
Focus set 53.5
Dome Temp.

Transparency Conditions excellent
20.30: good

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	B						30/30	focus 53.3	focus good
18 53	C	W 1 25	23 05	0	5.96	B9	8-8-8	B8-B9 #6 (2) {8188 8190	fine
[illegible]	A	W 1 39	17 14	0	6.28	B9	8-8-8	" only bright * in field #6 {8191 8193	fine
19 42	B	W 1 47	+10 08	0	6.20	B8	8-8-8	" " " " " " #6 (2) {8194 8,4	fine
20 05	C	W 2 03	-7 39	0-1	5.67	B8	8-8-8	B8-B9 " " " " " #6 {8196 8198	fine
[illegible]	A	W 2 50	42 04	0	7.7	92	8-8-8	std. Vel. " " " #8 (15) {8199 8213	fine
21 34	B	W 1 36	+6 05	0	7.3	OB	8-8-8	I Mon (SK) #8 {8213 8223	fine guiding
22 41	C	W 1 32	29 17	0	9.89	F5	6-6-6	K AFS #9 (30) {8223 8253	fine
—	A						30/30	focus setting 50	Good focus
23 13	A	0 2 39 W	44 54	0	9.59	F4	6-6-6	KAFS #9 (30) {8254 8284	fine (guiding)
23 39	C	W 2 22	29 25	0	10.00	F8	6-6-6	KAFS #9 (30) 8285 8311	broken but OK
								PH A & B loaded	

Date 1/2 March/65 Mon/Tues. **Observer** Mcl. – VdB **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.E.	Hour Angle End
358 T 1	1767 -60 III	0844	+12	Ch II		I = 10	21:30	g = G			1 00 E
2	-65 I			〃			2140	g = G			0 50 E
3	-34 I			〃			2150	g = G			0 40 E
4	-35 II			〃			2205	g = F			0 35 E
5	-32 II			〃			2210	g = F			0 20 E
6	-31 III			〃			2215	g = F			0 15 E
7	105			〃			2235	g = F			0 05 W
8	81			〃			2240	g = F			0 10 W
9	27 I			〃			2250	g = F			0 20 W
10	25 I			〃			2255	g = F			0 25 W
11	81			〃			2300	g = F			0 30 W
12	105			〃			2305	g = F			0 35 W
13	15 I			〃			2310	g = F			0 40 W
14	84			〃			2320	g = F			0 50 W

Dome Temp. 30°F

CO_2 in } 1800
V=700 }

Transparency Conditions V. Fine

New guide Telescope mounted 1800–20.30.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1h00 E							
0 50 E							
0 40 E							
0 35 E							
0 20 E							
0 15 E							
0 05 W							
0 10 W							
0 20 W							
0 25 W							
0 30 W							
0 35 W							
0 40 W							
0 50 W							

Cont.

Date Mo/Tu Mar 1/2 **Observer** MCC vdB **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
358-15	1767-105	0849	+1200	ch II		I=10		2325	Q=F		0055W
16	81							2330			0100W
17	141							2337			0107W
18	1-I							2345			0115W
19	170							2350			0120W
20	105							2355			0125W
21	81							2400			0130W
22	244							0005			0135W
23	224							0010			0140W
24	231							0015			0145W
25	105							0025			0155W
26	81							0030			0200W
27	164							0035			0205W
28	190							0045			0215W
29	105							0050			0220W

Dome Temp.

Focus

Dome Temp.

Transparency Conditions Very Fine

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 55W							
0 100W							
0107W							
0115W							
0120W							
0125W							
0130W							
0135W							
0140W							
0145W							
0155W							
0200W							
0205W							
0215W							
0220W							

Cont

Date Mon/Tue Cont **Observer** **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
358-30	M67 - 81	08 49	+12	CH4		T=10		00 55	cf = F		2 25W
-31	153							01 00			2 30W
-32	108							01 05			2 35W
-33	105							01 10			2 40W
-34	81							01 15			2 45W
-35	135							01 25			2 55W
-36	105							01 30			3 00W
37	81							01 33			3 03W
38	105							01 36			3 07W
39	81							01 40			3 11W
40	105							01 43			3 14W
41	81							01 50			3 21W
42	105							01 54			3 25W
43	81							01 58			3 28W
44	105										

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions ....V. Fine........

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2 25 W							
2 30 W							
2 35 W							
2 40 W							
2 45 W							
2 55 W							
3 00 W							
3 03 W							
3 07 W							
3 11 W							
3 16 W							
3 21 W							
3 25 W							
3 29 W							

CO-T

Date........................ **Observer**........................ **Julian Day**........................

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
358-45	1767-81	0849	+12	CH2				0207		
46	105			"				0210		
47	81							0215		
48	105							0220		
49	81							0225		
(50	105							0230		
51	105							0235		

Dome Temp.

Focus

Dome Temp.

Hour Angle End
338/9
341
346
351
356
401
406

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions v Fine

Ending Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		3 38							
		3 41							
		3 46							
		3 51							
		3 56							
		4 01							
		4 06							

Date 2 Mar /65 Tues **Observer** Hr / Msc **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
28205 F,	focus test in in/out out			G 40	IIa Ob	13	22° F			A	
28206	BD +29° 2495	14 02.6	+29 45	G 40	IIa Ob	17	22° F	03 06	91 06 08	B	W 2 24
28206 T	Calibration Step Wedge			for	plates	28205 F,		- 28206		C	

Dome Temp. 24 °F **Transparency Conditions** excellent

Focus ....

Dome Temp. ....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	A						30/30	focus setting 50	good focus.
6 08	2	W 2 24	29 26	6?	10.00	F8	8-8-8	KAFS (finder field) #9 (3) {8318 / 8354.5	weak
	FC							(PH A & C loaded)	

Date 2-3 Mar Tues - Wed **Observer** HL - Mt Msu **Julian Day**

Dome Temp.
Focus 5
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28207	HR1160 HD23552	03 41.0	50 26	G40	IIa0b	13	32°F	18 45 [9]	19 03	C	W1 42
28208	HR1161 HD23594	03 41.3	+56 49	G40	IIa0b	13	33°F	19 07 [19]	19 45	A	W2 24
28209	HR1305 HD26670	04 08.1	+61 36	G40	IIa0b	13	33°F	19 49 [7]	19 57	~~A~~ B	W2 07
28210	HR1510 HD30085	04 38.4	-70 45	G40	IIa0b	13	33°F	20 03 [6]	20 14	~~A~~ C	W1 53
28211	HR 1371 HD27650	04 16.6	42 12	G40	IIa0b	13	33°F	20 22 [8]	20 37	A	W2 42
28212	HR 1424 HD28503	04 24.6	+39 48	G40	IIa0b	13	32°F	20 41 [11]	21 03	B	W2 59
28213	HR 1576 HD31373	04 50.2	+14 54	G40	IIa0b	13		21 10 [17]	21 43	c	03 5[illegible]
28214	HR1860 HD36589	05 27.7	+20 24	G40	IIa0b	13	30°F	21 48 [30]	22 47	A	[illegible]
28215	HR 2[illegible] HD 52860	06 57.7	+47 54	G40	IIa0b	13	29°F	22 56 [10]	23 15	B	W2 37
28216	HR [illegible] HD58661	07 21.5	48 24	G40	IIa0b	13	28°F	23 21 [7]	23 35	c	W2 35
28217	HD91588	10 36.3	-01 13	G40	IIa0b	13	28°F	23 43 [34]	00 50	A	[illegible]
28218	HD103095	11 47.2	38 26	G40	IIa0b	13	28°F	00 58 [15]	01 28	B	[illegible]
28219	HD131861	14 50.9	+45°43'	G40	IIa0b	13	26°F	01 40 [45]	03 10	C	E1 17
28220	HR [illegible] HD139160	15 31.5	-25 57	G40	IIa0b	13	26°F	03 21 [22]	04 04	A	E1 05
28221	HR5912 HD142301	15 48.7	-24 57	G40	IIa0b	13	26°F	04 10 [14]	04 37	B	E[illegible] 4[illegible]

Dome Temp. 36 °F

Focus 53 (52 after 2250) (51 after #28219)

Dome Temp.

Transparency Conditions good (thick Ci in SW)
thin haze cover from 1915
clearing 2000; return 2030
poor after 2030
Improved about 0100

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W 1 42	+50 40	0	5.87	B8	8-8-8	B8-B9 seris 6 (2) {8362 8364	fine.
W 2 24	57 03	0	6.46	B9	8-8-8	B8+B9 # 6 (2) {8365 8367	fine.
W 2 07	61 45	0	5.59	B8	8-8-8	B8-B9 #7 (4) {8368 8372	guiding
W 1 53	70 47	0-1	6.37	B9	8-8-8	B8-B9 #7 (4) {8376 8380	fine.
W 0 42	42 20	0	5.96	B9	8-8-8	B8-B9 faint in field (does not seem to agree with given field) #7 (4) {8381 8385	fine.
W 2 59	39 55	0	6.71	B8	8-8-8	B8-B9 [Double: each component guided in one-half of slit] #7 (4) {8386 8390	fine
03 15 W	15 00	0	5.69	B8	8-8-8	B8-B9 about 1 mag. absorption #7 (4) {8391 8395	[illegible]
03 41 W	+20 27	0	6.04	B8	8-8-8	B8-B9 " " " #7 (4) {839[illegible] 839[illegible]	fine.
W 2 37	+47° 51	0	6.34	B9	8-8-8	B8-B9 #7 (4) {[illegible] 8403	fine.
W 2 35	48 15	0	5.55	B9p	8-8-8	B8-B9 #7 (4) {8404 8408	fine.
00 35 W	-01 33	0-1	7.4	K1	8-8-8	Std. Vel. (1-2 mag absorption) #8 (20) {8409 8429	fine.
00 03 W	+37 58	0	7.3	G5	8-8-3	Std. Vel. #8 (15) {8427 [illegible]	guiding
E 1 17	+45 26	0-1	7.64	F3	8-8.8	KA1-5 (15) {[illegible] [illegible]	guiding
E 1 05	-26 07	0−	6.0	B9	8-8-8	B8-B9 #7 (4) {8462 8466	guiding
E 0 48	-25 05	0−	6.2	B8	8-8-8	B8-B9 #7 (4) {8467 8471	fine

Date 3 Mar (cont'd) Wed **Observer** Mt-Mu **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28222	HD144661 (HR 5998)	16 01.9	-24 11	G40	II a O b	13	26°F	04 43	05 32 (25)	C	E 0 06
28223	HD144844 (HR 6003)	16 02.8	-23 25	G40	II a O b	13	26°F	05 37	06 01 (12)	H	W 0 22
~~[illegible] F~~	~~focus test in in/out~~										
28223 T1	Calibration Step Wedge				for plates		28207 - 20				
28223 T2	"	"	"		"	"	28221 - 23				

Dome Temp.
Focus 5
Dome Temp.

Dome Temp. 29°F

Focus 51

Dome Temp.

Transparency Conditions good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
E 0 : 06	-24 20	0	6.5	B8	8-9-8	B8-B9 #7 (4) {8372, 8376}	fine
W 0 22	-23 34		5.9	B9	8-10	B8-B9 #7 (4) {8377, 8378}	weak
			~~[illegible]~~	~~[illegible]~~	~~30/30~~	~~[illegible]~~	
						PH B loaded.	

179 PH A&C loaded
PH B in telescope

Date Mar 9-10/65 Tues/Wed **Observer** HL/Mse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.[illegible]	Hour Angle End
28224	HR1424 HD28503	04 24.6	+39 48	G40	IIaOb	13	33°F	19 50 [38]	21 06	B	03 30w [illegible]

Dome Temp. 3[illegible]
Focus 53[illegible]
Dome Temp.

Dome Temp. 37°F

Focus 5 3/2 ;

Dome Temp.

Transparency Conditions ~~poor~~ Light fog

Ending Time E.S.T.	P.P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
21 00	3	03 30 W	39 55′	0-1	6.21	B8	8-8-	B8-B9 prog. ~3 mag. absorption — ① 5877 8 seen 6 78780	weak guiding

1925 - 1940 TEST for Auto. Guiding Project. HV

Date Mar 10/11 /65 **Observer** V/Mce - Rc **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28225	HR 1355 HD 27170	04 08.1	+41 36	G40	IIa O6	13	24°F	18 56	19 12	A	W1 54
28226	HD 46484	(1950) 06 31.3	+4 42	G40	IIa O6	13	22°F	19 40 (47)	~~20~~ 13	B	W1 30
28227	HR [illegible] HD 43445	06 11.1	-13 41	G40	IIa O6	13	20°F	21 19 (6)	21 31	C	W2 15
28228	HR [illegible] HD [illegible]	06 14.4	-08 32	G40	IIa O6	13	20°F	21 27 (22)	22 11	A	W2 35
28229	HR 2932 HD 61324	07 [illegible]	-14 [illegible]	G40	IIa O6	13	20°F	22 21 (20)	23 00	B	W2 22
28230	HR [illegible] HD [illegible]	11 [illegible]	-[illegible]	G40	IIa O6	13	20°F	23 06 (18)	23 41	C	E0 26
28231	HR 4696 HD 107348	12 15.4	-21 39	G40	IIa O6	13	20°F	23 48 (9)	00 05	A	E1 11
28232	HD 114762	13 07.5	+18 02	G40	IIa O6	13	20°F	00h 14m (39)	01h 32	B	E0 [illegible]
28233	BD +29° 2495	14 02.6	+29 45	G40	IIa O6	17	18°F ~~21°F~~	02h 09m (100)	05h 27	C	W1 [illegible]
~~28234~~	~~HD 170235~~	~~18 23.2~~	~~-25 19~~	~~G40~~	~~IIa O6~~	~~13~~				A	
28233 F1	focus test in in/out out			G40	IIa O6	13	16°F	focus shift at 9.1/3		A	
28233 T	Calibration Step Wedge			for plates # 28224 - 33 F1							

Dome Temp. 25°F / 24°F
Focus 50⅔ / 49⅓ after #26 /
Dome Temp.

Transparency Conditions very good – excellent
strong NW wind ~ 20
wind down after 0100

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
12	[illegible]	W 1 54	61 46	0	5.59	B2	8-8-8	B8-B9 windy ! Sons 7 (4) {8782 8786	fine
13	B	W 1 38	+04 42	1	8.1	B1 V	8-8-8	I Mon – (SK) (finder field) #9 (30) {8789 8819	fine.
31	C	W 2 15	−13 41	D	4.97	B9	12-12	B8-B9 trouble in capping device:— plate may be fogged #7 (4) {8820 8824	fine.
11	A	W 2 55	−08 32	0	6.15	B9	8-8-8	" #7 (4) {8824 8828	fine.
on	B	W 2 22	−14 21	0−	6.00	B9	8-8-8	" d+e. #7 (4) {8828 8832	[illegible]
	C	E 0 26	−27 04	0−	[illegible]	B9	8-8-8	" d+e #7 (4) {8832 8836	fine!
	A	E 1 16	−21 57	0	5.25	B8	8-8-8	B8-B9 d+e (finder field) #7 (4) {8836 8840	guiding
	E	E 0 41	+17 43	1	8.2	F9	8-8-8	Std. vel. #9 (45) {8840 8885	fine
	C	W 2 21	+23° 27′	1	10.00	F8	8-8-8	KAFS #9 (30) {8886 8916	out of focus
	A				6.71	B5e		Cn – Be #7 (4) {8917 8921	
	A						30/30	E.P.E.C. [illegible]	O.K.

'83 1900 · align finder for ✓ dt & wait for sky to clear

Date 11-12 Mar/65 Thurs-Fri **Observer** L - Rc Mse **Julian Day** ....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28234	HR 1619 HD 32273	04 56.8	+01 28	G40	IIa0b	13	22°F	20 17	10 20 37	A	W2 38
28235	HR 1724 HD 34317	05 11.5	+01 50	G40	IIa0b	13	20°F	20 41	14 21 09	B	W2 55
28235 F,	focus test in in/out out			G40	IIa0b	13	20	—	—	C	—
~~28236~~	~~H.D. 71833~~	~~08 24.4~~	~~-20 37~~	~~"~~	~~"~~	~~13~~	19°F	22 45		A	—
28236	BD +45° 1859	10 38.3	45 12	G40	IIa0b	17	18°F 14°F at end	23 24	89 02 22	B	W2 42
28236 F,	focus test in in/out out			G40	IIa0b	17	14	at end	—	c	—
28237	HD 107328	12 15.3	+03 53	G40	IIa0b	13	14°F	02 34	8 02 49	A	W1 33
28237 F,	focus test in in/out out			G40	IIa0b	13	14°F	—	—	B	—
28238	HR 5801 HD 139160	15 31.5	-25 57	G40	IIa0b	13	14°F	02ʰ 59	13 03ʰ 23ᵐ	C	E0 .7
28239	HR 5912 HD 142301	15 48.7	-24 57	G40	IIa0b	13	14°F	03ʰ 45	14 04 22	A	E0 28
28240	HR 5998 HD 144661	16 01.9	24 11	G40	IIa0b	13	13°F	04 27	15 04ʰ 57	B	E0
28241	HR 5387 HD 153401	17 06.2	-27 38	G40	IIa0b	13	13°F	05ʰ 03	m15 05ʰ 33	C	E0
28241T	Calibration step wedge				for plates	28234 - 41					

Dome Temp.
Focus 49.7
Dome Temp.

Dome Temp. 25°F
Focus 49 1/3 / 48 1/2 / 47 1/3
Dome Temp. ....

Transparency Conditions poor
2030 – cloud in [illegible]
2300 – excellent but 1/4 moon
0130 – some cloud in SW & W wind
0230 – cirrus

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS			Quality
20 37	A	W 2 38	+01 34	0	6.16	B8	8-8-8	B8-B9	BINARY – COMPANION 12 MAG FAINTER	#7 (3) {8921 8924	fine
21 09	B	W 2 55	+01 55	0-1	6.35	B9	8-8-8	B8-B9	clouds coming	#7 (3) {8195 8198	l weak
—	C	—	—	—			30/30				good focus
	A				~~6.4~~	~~B8~~	~~8-~~	~~B8-B9~~	~~Not Good~~	~~#7~~ {8930	
02 22	R	W 2 42	44 54	0-1?	9.59	F4	6-8-6	KAFS	(FINDER FIELD) focus 48 1/2 EXP MTR BALA VERY DIFFICULT	#9 (30) {8932 8962	*1) fine
	C	—	—	—			30/30		same focus ([illegible]) NOT [illegible]		good focus
02 49	A	W 1 33	+03 30	1	6.1	K1	8-16	Std Vel	focus 47 1/3	#7 (8) {8964 8972	fine
—	Z	—		—			30/30		"		good focus
[illegible]	C	E 0h 57'	-26° 8'	0-	6.0	B9	8-8-8	B8-B9	"	#7 (4) {8972 8976	g[illegible]
[illegible] 22	A	E 0 28	-25 05	0-	6.2	B8	8-8-8	B8-B9	"	#7 (4) {8977 8981	guiding
[illegible]	E	E 0h 06	-24° 19	0-	6.5	B8	8-8-8	B8-B9	"	#7 (4) {8981 8985	fine
[illegible]	C	E 0h 34	-27 42	0=	6.0	B9	8-8-8	B8-B9	"	#7 (4) {8985 8989	fine

*1) – ACCORDING TO SEC. [illegible], PLATES 28169 & 28186 WERE DIFFERENT STAR.

185

PH A, B, C loaded; +3 plates in pier

Date 12/13 March/65 Fri/SAT. **Observer** VdB MCL **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
359 T 1	HD 41117	$06^h 01^m.7$	+20°08′			τ = 10		17 38			0^h40 W
2		"	"					18 18			1 20 W
3	β Cnc	$08^h 14^m.5$	+09°19′					20 32	20 44		0 20 E
4	η Hya	08 41 3	+03 32					20 55			0 40 E
5	β Cnc	08 14 5	+09 19					21 10			0 00
6	η Hya	08 41.3	+03 32	V-A5	B-A4, U-A5			21 20			0 1[illegible] E
7	β Cnc			A4				21 36			0 20 W
8	η Hya							21 50			0 13 W
9	β Cnc							22 03			0 11 W
10	η Hya							22 14			0 [illegible] W
11	β Cnc							22 24			01 14 W
12	η Hya							22 36			0[illegible] W
13	β Cnc							22 48			01 [illegible] W
14	η Hya							23 00			01 22 W
15	β Cnc							23 10			02 00 W

Dome Temp. 32°F   COzm / 70VV } 1800

17 00 n D

Focus ....

Dome Temp. ....

Transparency Conditions Excellent (except for clouds on West Horizon)

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0ʰ40 W			4.63				
1ʰ20 W			5.90			32°F 20.00	
0ʰ22ᵐE			3.52				
0 40 E			4.30	B3V		25°F 22:30	
0 00			3.52	K4III			
0 14 E						24°F 24 00	
0 26 W							
0 13 W							
0 52 W							
0 37 W							
01 14 W							
00 59 W							
01 37 W							
01 22 W							
0 2 00 W							

187

Date 12/13 March cont **Observer** -ME **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
359-16	η Hya								23 24		1 47 W
359-17	β Cnc								23 35		2 25 W
-18	η Hya								23 43		02 12 W
-19	β Cnc								00 01		02 51 W
20	η Hya								00 13		02 31 W
21	β Cnc								00 25		03 14 W
22	η Hya								00 36		02 59 W
23	β Cnc								00 47		03 36 W
24	η Hya								00 58		03 20 W
25	β Cnc								01 09		03 58 W
26	η Hya								01 17		03 29 W
28245 F / 28245 TF	~~Focus Test~~ in in / out out										
28242	HD 114762	13h 07m.5	+18° 02′	G40	IIa0b	13	20°F	02 05	25 02 55	A	
28243	HD 138998	14 56.6	+49 56	"	"	"	20°F	03 15	10 03 35	B	
28244	HD 139860 HR 5801	15 31.5	-25 57	"	"	"	20°F	03 50	20 04 30	C	
28245	HD 142301 HR 5912	15 48.7	-24 57	"	"	"	20°F	[illegible]	20 05 30	A	

Dome Temp. ....

Focus 49.2

Dome Temp. 24°

Transparency Conditions Perfect

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1 47 W							
2 25 W							
02 12 W							
02 51 W							
02 35 W							
03 14 W							
02 58 W							
03 36 W							
03 20 W							
03 58 W							
03 39 W							
					30/30		C K.
00 50 W	+17°42′	1	8.2	F7	8-8-8	Standard Vel. #8 {8992 9007	fine
00 33 W	+49 37	1	6.8	M2	8-8-8	" #7 {9009 9016	[illegible] guiding
00 00	−25 03	0	6.0	B9	8-8-8	B8–B9 #7 {9017 9021	[illegible]
00 30 W	−25 07	0	6.2	B8	8-8	B8–B9 #7 {9022 9026	guiding

189 PH C loaded in pier

Date Tues-Wed, Mar 16-17, 1965 **Observer** Cn - Rc Mse **Julian Day** ....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
28246	HD 63462	07 45.9	-25° 42'	G 40	IIa O	13	30°F	20 53	21 11	C	00 45 W
28247	HD 66141	07 57.1	+02 36	G 40	IIa O	13	"	21 16	21 32	A	00 50 W
28248	I UMa HD 78362	09 02.7	63 55	G 10	IIa O	9	"	21 43	23 45	A	W1 57
28249	HD 109379	12 29.1	-22 51	G 10	IIa O	9	27°F	23 55	00 53	B	E0 17
28250	BD+29°2495	14h 02.6	+29° 45'	G 40	IIa O	17	26°F	01 06	03 59	B	W1 15
28251	HD 131861	14 50.9	45 43	G 40	IIa O	13	25°F	04 05	04 21	A	W0 49
28251 F₁	focus test [illegible] G 40				IIa O	13	25°F			C	
28251 T	Calibration Step Wedge				for plates 28246-7			28250-51F₁			

Dome Temp. 33 °F

Focus 52 1/2 // 51 1/3

Dome Temp.

Transparency ~~Conditions~~ POOR ~ full moon Cloud + snow until 20:30
21:15 Cloud from north
- better after 2300
- ~~getting cloudy after 0300~~

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	C	00 45 W	-25 52	0⁻	4.39	B0Vpe	8-8-8	Cn - Be (focus 52 1/2) #6 (2) {9030 9032	fine
32	H	00 52 W	2 26	0	5.5	K3	8-8-8	Std Vel (*1) #7 (8) 9033 9041	fine
3 45	A	N1 57	63 38	~~0~~ 2⁻	4.74	F5IA5	6-6-6	INTERSTELLAR LINE PROG. occasional cloud #6 (30) {9042 9072	guiding
53	B	E0 17	-23 11	0⁻	2.8	G4	6-6-6	Std Vel #5 (30) {9073 9103	fine:
59	B	W1 15	29° 22′	0-1(?)	10.0	F8	8-8-8	KAFS BINARY (focus 51 1/3) #9 (30) {9104 9134	badly fogged guiding
4	A	W0 49	45 26	1	7.64	F3	8-8	KAFS CLOUDS FORMED OVERHEAD - FAST! #8 (12) {9135 37	weak
	C						30/30		O.K.

* PLATE HOLDER 3rd B Loaded WITH PLATE #1

NEXT UNEXP. PLATE ∴ INCLUDED EXTRA

*1 - GOT PLATE #28247 MIXED W

191 PH A, B, C loaded in piece

Date MAR 19/20 1965 Fri-Sat **Observer** Fl, Mc — Mt **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28252	HD 54605	7 04.3	-26 14	G10	IIaOb	9	20°	19:51	20 20:31	A	1 01 W
360 F 1	HR 3410	08h 35.8	+05° 49′	Photometer		τ = 20		21:18	21:23		0 20 W
2	HR 3454	08 41.4	+03° 31′					21:31	21:39		0 32 W
3	HR 3974	10h 05.4	+35° 27′					21:49	21:57		0 46
4	HR 3982	10h 06.5	+12° 08′					22:08	22:24		0 08 E
5	HR 4133	10 31.0	+09° 29′					23:23	23:35		/
28253	HD 107328	12 15.3	+03 53	G40	IIaOb	13	12°	00 20	33 01 25	A	0 37 W
28254	HD 131861	14 50.9	+45 43	G40	IIaOb	13	12°	01 38	31 02 40	B	0 42 E

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions EXCELLENT (2200 fair)

Saw unidentified satellite at 19:20 - high inclination orbit, tumbling.

0205 getting very hazy

0200 heavy haze, light cloud

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
20 3[illegible]	A	1 01 W	-26 19	5"	2.48	F8Ia	6-6-6	Plate broke 4?@ #7 Fl Supergiant sens4 {9140 9170}	fine but broken
21 23		0 20 W			4.2	A0V		B = 2.849	
[illegible]		0 30 W			4.3	B3		2.651	
[illegible]		0 34 E			4.5	A7V		2.839	
[illegible]		0 10 E			1.3	B7I		2.725 ← ☆ #1!! Dec set would not operate, something to do with dec clamp	
[illegible]		—			3.9	B0		2.564 Haze.	
[illegible]	[illegible]	0 37 W	+05 30	D	5.1	K1	8-8-8	Std Vel [illegible] #7 {9173 9181}	[illegible]
[illegible]	[illegible]	0 40 E	+45 26	D	7.5+	F5	8-16	KH15 binary Terminated #8 {9182 9188}	[illegible]

Clouds about 2:30

PH A, B, C loaded on pier

193

Date [illegible] Mar 20-21 1945 **Observer** [illegible] – Fl, McL **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28255	[illegible] 58	06 16.8	-11 44	C 40	IIaO B	13	20	19 21	19 41	A	[illegible]
28256	HD 49787	06 45.0	-05 24	C 40	IIaO B	13	20	19 46	20 50	B	[illegible]
28257	HD 63462	07 43.9	-25 42	C 40	IIaO B	13	18°	20 56	21 10	C	[illegible]
28258	BD +29° 1907	09 24.6	+29 33	C 40	IIaO B	17	17°	21 19	02 20	B	04 23W
28259	HD 142184	15 48.0	-23 41	"	"	13		02 37	02 55	B	1 20E
28260	HD 131351	14 50.9	+45°43′	"	"	13	13°	03 10	04 39	B	[illegible]
28261	HR 6003 HD 144334	16 02.8	-23°25′	"	"	13	10°	04 45	05 15	A	[illegible]
28261 F	Focus test	[illegible]									

Dome Temp.
Focus
Dome Temp.

Dome Temp. 20°

Focus Temp 20 set 49

Dome Temp. ....

Transparency Conditions poor - l. cloud around [illegible], [illegible] above. 21ʰ good.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible] 41	[illegible]	00 57W	−11 46	0	5.62	B1 V pe	8-8-8	Cn Be — 11 9196, #7 9200	guiding [illegible]
[illegible]	[illegible]	01 37W	−05 28	0-1	7.49	B1 V pe	9-8-8	Cn Be occasional cloud — 30 9201, #9 9230	guiding
[illegible] 10	[illegible]	00 58W	−25 51	0	4.39	B0 V pe	16-8	Cn Be — 2 9231, #6 9233	no [illegible]
02 20	[illegible]	04ʰ 28W	+29 15	0	9.99	F5	9-8-8	KAFS Binaries — 9235, =9 9280	fine
[illegible] 55	[illegible]	1 20E	−23 52	0	5.37	B3 V ne	8-8-8	Cn Be — #8 9283, 9293	fine
[illegible]	3	1 23W	+45° 26′	0⁺	7.64	F3	8-8-8	KAFS Binaries — #8 {9295, 9310}	fine
[illegible]	[illegible]	0 47W	−23 35	0	5.9	B9	8-8-8	B8-B9 — #8 {9311, 9321}	[illegible]
							30/30		[illegible]

two plates stuck together
[illegible] will be the blank with 9321

Date Sun-Mon Mar 21-22 1965 **Observer** HG – Hr Chyse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
28262	HR 1619 HD 32273	04h 56.m8	+01° 28′	G40	IIaOb	13	16°	19 16 13	19 41	+	02 21W
28263	HR 1671 HD 33224	05 03.6	-08 47	G40	IIaOb	13	15°F	19 48 11	20 09	B	02 20W
28264	HR 1826 HD 36058	05 23.9	-03 24	G40	IIaOb	13	11	20 14 17	20 47	C	W2 59
28265	HR 2109 HD 40574	05 54.6	+01 27	G40	IIaOb	13	13°F	20 51 19	21 28	A	W3 11
28266	HR 2613 HD 5[illegible]	06 54.0	+07 27	G40	IIaOb	13		21 31 10	21 51	B	W2 [illegible]
28267	HR 2840 HD 58599	07 21.2	+11 12	G40	IIaOb	13	11°F	21 55 9	22 13	C	W2 24
28268	BD +45°1753	09 36.7	45 30	G40	IIaOb	17	11°F	22 24 102	0148	A	03 45W
	TESTS AUTO. GUIDING PROJECT.							0150	0230		
28268 T1	Calibration Step Wedge – for plates 28260 – 61 F										
28268 T2	" " " " " 28253 – 59, 62 – 68										

EXCELLENT

Dome Temp. 17°F

Focus 47½ / 46

Dome Temp.

Transparency Conditions Fair Cloud on horizon, strong w wind

0115 HAZE

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	[illegible]	02 21W	+01 33	0-1	6.16	B8	8-8-8	B8-B9 Prox. sens #6 (2) {9323 9325	fine
[illegible]	[illegible]	02 42W	-08 48	0	5.62	B8	8-8-8	B8-B9 sens #6 (2) {9325 9327	fine
[illegible]	[illegible]	W 2 59	-03 20	0	6.15	B9	8-8-8	B8-B9 dome 13° sens #6 (2) {9327 9329	fine
[illegible]	[illegible]	W 3 11	-01 25	0	6.35	B9	8-8-8	B8-B9 sens #6 (2) {9329 9331	fine
[illegible]	[illegible]	W 2 34	+07 23	0	6.28	B8	8-8-8	B8-B9 sens #6 (2) {9331 9333	fine
[illegible]	[illegible]	W 2 29	+11 05	0	6.[illegible]	[illegible]	8-8-8	B8-B9 {9333 9335	fine
								set focus 46	
0115	[illegible]	03 48W	+45 13	0	9.87	A2 V	8-8-8	KA1=5 #9 30 {9335 9366	5 [illegible]

G40 P.H. B Loaded

197 WORK DONE ON VISITOR'S EYEPIECE BEFORE 21 30

Date ~~Tues.~~ Wed March 23/21 Observer Hb - Mt Mse Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End	Dome Temp.
28269	HD 67725 HR 3189	08^h 04.^m2	-11° 03′	G40	IIaOb	13	25°F	21 34 (19)	22 11	A	W1 52	
28270	HD 96314 HR 4317	11 01.1	-26 45′	G40	IIaOb	13	"	22 16 (31)	23 18	B	W0 02	
28271	HD 92728 HR 4187	10 37.4	+57 43	G40	IIaOb	13	22°F	23 24 (")	23 46	A	W1 53	
~~28272~~	~~HD 103095~~	~~11 47.2~~	~~38 26~~	~~G40~~	~~IIaOb~~	~~13~~				~~A~~		
28271 F,	focus test			G40		13	22°F			B		

Focus 5

Dome Temp. 23 °F

Focus 51

Dome Temp.

Transparency Conditions good

2300 Ac — HEAVY ... FROM SSW

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W 1 52	-11 13	0⁻	6.23	B9	8-8-8	B8-B9 Prog. seeing #6 (2) {9369 9371	[illegible]
W 0 02	-27 05	5⁻	5.64	B8	8-8-8	B8-B9 (d & c) incomplete — clouds — #6 (2) {9371 9372.8	[illegible]
W 0 53	+57 24	0⁻⁻	5.77	B9	8-8-8	B8-B9 clouded out #6 (2) {9373 9374.8	[illegible]
			~~7.3~~	~~G5~~		~~std. vel. #8 15 {9376 9391~~	
					30/30	focus still 51	good [illegible]

PH A, B, C loaded + 5 unexp. plates

199

Date Wed Thurs 24/25 Mar Observer Hdy - Rc Myse Julian Day

Dome Temp.
Focus 5
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.F	Hour Angle End
28272	HR 2613 HD51892	06 54.0	+07 27	G40	IIaOb	13	22°F	20 11 ^{10}	20 31	A	W1 27
28273	HR 2605 HD51688	06 53.3	+26 03	G40	IIaOb	13	22°F	20 38 ^{10}	20 58	B	W1 52
28274	HR 2645 HD52860	06 57.7	+47 54	G40	IIaOb	13	21°F	21 02 ^{10}	21 22	C	W2 11
28275	HR 2676 HD53929	07 1.8	+05 04	G40	IIaOb	13	20°F	21 26 ^{11}	21 48	A	W2 35
[illegible]										B	
28276	HR 2801 HD 57608	07 16.9	+0 22	G40	IIaOb	13	20°F	21 52 ^{10}	22 12	B	W2 44
28277	HR 2840 HD58599	07 21.2	+11 12	G40	IIaOb	13	19°F	22 16 ^{12}	22 40	C	W3 0[illegible]
28278	HR 4187 HD 92728	10 37.4	57 43	G40	IIaOb	13	19°F	22 55 ^{8}	23 07	A	W0 18
28279	HR 4215 HD93427	10 42.1	65 40	G40	IIaOb	13	18°F	23 12 ^{10}	23 32	B	W0 37
28280	HR 4317 HD96314	11 01.1	-26 45	G40	IIaOb	13	18°F	23 49 ^{14}	00 17	C	W1 05
28281	HR 4.96 HD107348	12 15.4	-21 34	G40	IIaOb	13	16°F	0 28 ^{8}	00 43	A	W0 17
28282	HD 114762	13 07.5	+18 02	G40	IIaOb	13	15°F	0 52 ^{26}	01 45	B	W1 27
28282 F	~~focus test~~			G40	IIaOb	13				C	
28282 T	Calibration Step Wedge				for plates		28272 - 82 F.				

Dome Temp. 22°F
Focus 51 ½ / 3 // 49 // 48
Dome Temp. ......

Transparency Conditions Cloudy at first fair after 2330 – excellent
thin haze 2200 – good [illegible]

Ending Time E.S.T.	P.	Hour Angle End	Declination		Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
[illegible]	4	W1 27	+07	23	0	6.28	B8	8-8-8	B8-B9	set focus 51 ½; [illegible] some clouds [illegible]	#7 (4) {9378 9382	fogged
[illegible]	B	W1 52	25	59	0-1	6.27	B9	8-8-8	B8-B9	FIELD [illegible]	#7 (4) {9382 9386	fine
[illegible]	C	W2 11	47	51	(1)	6.34	B9	8-8-8	B8-B9	dome 20°F FIELD [illegible]	#7 (4) {9387 9391	fine
[illegible]	A	W2 35	+04	58	0 (0)	5.90	B8	8-8-8	B8-B9	dome 18°F	#7 (4) {9391 9395	fine
										set focus 49		
[illegible]	B	W2 44	+0	15	(1)	5.95	B8	8-8-8	B8-B9		#7 (4) {9395 9399	fine
[illegible]	C	W3 07	+11	06	0	6.24	B8	8-8-8	B8-B9		#7 (4) {9399 9403	fine
23 07	A	W0 18	57	23	(0)	5.77	B9	8-8-8	B8-B9		#7 (4) {9403 9407	fine
[illegible]	B	W0 37	65	20	0	6.22	B9	8-8-8	B8-B9	TELESCOPE [illegible]	#7 (4) {9408 9412	fine
[illegible]	C	W1 05	-27	05	0	5.64	B8	8-8-8	B8-B9 (d+e)	used vB's finder [illegible] here in finder	#7 (4) {9412 9415	weak
23 43	A	W0 17	-21	59	0	5.25	B8	8-8-8	B8-B9	focus 48 dome 10°F	#7 (4) {9416 9420	weak
[illegible]	B	W0 27	17	43	0-1	8.2	F7	8-8-8	std. vel. CLOUDS		#9 (45) {9422 9443	weak
								30/30				

PECULIAR NOISES – SHOULD BE [illegible] good [illegible]
* ⟹ CLOCK FOR STD TIME IS MAKING [illegible]
NOT RELIABLE
REQUIRES ATTENTION
UPPER (WEST) DOME TURNING SWITCH.

201 PH A loaded (G40)

Date Mar 27 1965 Sat Sun **Observer** FL — **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.F
28283				G10	IIaOb	9		—	—	
	28 Mar/65 - Sun									
28282 F_2	focus test			G10	IIaOb	9	31°F			A
28282 F_3	"	"		G10	IIaOb	9	29°F			A
~~28283 F_4~~	~~focus test~~			G10	IIaOb	9				A
28282 F_4	focus test			G10	IIaOb	9	29°F			A

Dome Temp.
Focus
Dome Temp.

Hour Angle End
—

Dome Temp. 30°

Transparency Conditions Haze + Clouds

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						Clouded out!!! (phooey)	
					30/30	dome temp 32° F	sl c to red
					30/30	focus changed from 1.5 to 2.5 &	c to red [illegible]
						readjusted arc gap to ~1/16". plate	same as't
						broke during exposure	
					30/30	focus changed from 2.5 to 2.0	v sl c to red

E S T APPROX

Date 30 - 31 Mar/65 Tues - Wed **Observer** Cn - Mt Mac **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28283	HD 58978	07 22.8	-22 53	G 40	IIaOb	13	24°	19h 32m 8	19 48	A	0 36 W
28284	BD+45° 1753	09 36.7	+45 30	G 40	IIaOb	17	24°	20 03	139 00 40	B	2 55 W
~~28285~~	~~HD 103095~~	~~11 47.2~~	~~38 26~~	~~G 40~~	~~IIaOb~~	~~13~~	15°			~~C~~	
~~28286~~	~~HD 107328~~	~~12 15.3~~	~~+03 53~~	~~G 40~~	~~IIaOb~~	13				A	
~~28287~~	~~BD +29° 2495~~	~~14 02.6~~	~~29° 45'~~	~~G 40~~	~~IIaOb~~	~~17~~				~~B~~	

28284 T Calibration Step Wedge for plates 28283 - 4.

Dome Temp.
Focus 40.
Dome Temp.

Dome Temp. 23° Transparency Conditions Excellent

Focus 50.5 – 47.5 Why was STD TIME clock stopped at 2h ?

Dome Temp. ...... CLOCK IS BROKEN

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible] 48	[illegible]	0 36 W	−22 59	0	5.25	B0IVpe	8-8-8	Cn Be #7 9453 9457	fine
[illegible] 40	[illegible]	2 55 W	+45 13	0(?)	9.87	A2V	8-8-8	KAFS Binary N. start FIELD drawn to [illegible] (30) #9 9457 9487	fine
								– [illegible] very slow [illegible] – dec clamp stuck after	
~~[illegible]~~					~~7.3~~	~~G5~~		~~Std Vel~~ #8 (15)	
~~[illegible]~~					~~6.1~~	~~K1~~		~~Std Vel~~ #7 (8)	
~~[illegible]~~					~~10.00~~	~~F8~~		~~KAFS~~ #9 (45)	

Clouds 00 45

PH A + C loaded

205

Date 31 Mar – 1 Apr Wed – Thurs **Observer** Hb – Rc Mse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28285	HD 54605	07 04.3	−26 14	G10	IIa Ob	9		19 13 (17)	19 47	A	0 33W
28286	δ Gem HD 47105	06 31.9	+16 29	G10	IIa Ob	9 XL	28°F	19 55 (5)	20 05	B	W0 48
28287 F,				G10	IIa Ob	9				B	
28287	δ Gem HD 47105	06 31.9	+16 29	G10	IIa Ob	9 XL	28°F	20 07 (6)	21 18	A	W0 01
28288	HR 2932 HD 61221	07 33.1	−14 13	G40	IIa Ob	13	28°F	20 30 (13)	20 55	A	01 40W
28289	HR 3470 HD 74604	08 39.8	+67 05	G40	IIa Ob	13	27°F	21 07 (5)	21 17	B	00 5 W
28290	HR 3774 HD 82327	09 26.2	+74 47	G40	IIa Ob	13	27°F	21 21 (8)	21 37	C	W0 27
28291	HR 4215 HD 93427	10 42.1	+65 40	G40	IIa Ob	13	27°F	21 42 (5)	21 52	A	01 31W
28292	HR 4317 HD 96314	11 01.1	−26 45	G40	IIa Ob	13	26°F	22 20 (5)	22 30	B	E0 03
28293	HD 92588	10 36.3	−01 13	G40	IIa Ob	13	25°F	22 37 (30)	23 37	C	W1 35
28294	HD 103095	11 47.2	+38 26	G40	IIa Ob	13	23°F	23 45 (48)	1 [illegible]	A	W1 [illegible]
28294T	Calibration "Step Wedge"				for plates		28288 – 94			B	
										C	

TIMES ARE VERY UNRELIABLE – WAT[CH]

Dome Temp. 30°F

(G40) Focus 52/51/50/

Dome Temp.

Transparency Conditions *excellent*

11.30 – THIN HAZE BEGINNING TO APPEAR.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
[illegible] 47	A	01 00 W	−26° 18′	0	2.48	F8 Ia	6-6-6	F1 supergiants. PLATE BROKEN DURING EXP. ← ALL 3 PLATES WERE IN PL. A, POSSIBLY IT IS A PLATE BREAK?	#4 (22) {9494 9516	weak
[illegible] 05	B	W 01 48	+16° 26	0	1.9	A0 IV	6-[illegible]-12	Hd long slit – double exposure	#4 (30) {9516 9546	fine
	B						30/30			
[illegible] 18	A	W 2 01	+16 26	0-1	1.9	A0 IV	6-6-6	Hd " " – " " [illegible]	#9 (30) {9546 9576	guiding.
[illegible]	A	01 40 W	−14° 19′	0	6.40	B9	8-8-8	B8-B9 (d & e) focus set: 52	#7 (4) {9577 9581	fine
[illegible]	B	00 54 W	+66° 52′	0-1	6.10	B8	8-8-8	B8-B9 delay – fuse blew in RA slow motion	#7 (4) {9582 9586	fine
[illegible] 37	C	W 0 27	74 30	0 [illegible]	6.36	B9	8-8-8	B8-B9	# 7 (4) {9587 9591	fine
[illegible] 52	A	01 31 W	65 19	0	6.22	B9	8-8-8	B8-B9	# 7 (4) {9592 9596	fine
[illegible] 30	B	E 0 03	−27 05	0	5.64	B8	8-8-8	B8-B9 (d+e) focus set 51	# 7 (4) {9596 9600	weak
[illegible] 37	C	W1 35	−01 32	0	7.4	K1	8-8-8	Std. Vel. FIELD DRAWN	#8 (20) {9601 9621	fine
[illegible]	A	W1 51	38 00	0	7.3	G5	8-8-8	Std Vel focus set: 50 FIELD DRAWN	#8 (8) {9622 [illegible]	weak
	B				6.			CLOUDS		
	C				6.3	B8		K2-K		

FROM 2100 TIMES ARE OUT BY AT LEAST 15 MIN.

[illegible] WATCH? LOSING TIME ALL EVE.

UPPER (WEST) DOME TURNING BUTTON REQUIRES ATTENTION

207 PH B & Emuls. loaded

Date 2 Apr - 3 Apr **Observer** McL SK - Mt **Julian Day**

361 Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
~~355~~-3173	γ Gem	6h 35.7	+16° 26′	6/2/3+5/4/3		28″		20h 04			2h 6m
-3174	γ Gem	"	"	5/3/3		28		20 37			2h 37m
~~355-3175~~	~~ε Aur~~	~~4 59.5~~	~~+43 47~~			~~28~~					
355-317-	ξ Gem	7 2.1	+20 37	6/4/2 6/5/2		28″		21h 22			2h 5 W
355-3176	ζ Mon	8 6.9	-2 52	6/5/2		28		21h 53			
				6/5/3		28″					2h 22 W
355-3177	β Cnc	8 14.7	+9 18	6/5/3		28		22h 23			2h 49 W
355-3178	77912	9 4.3	+38 36	6/5/3		28″		22h 57			2h 24 W
355-3179	ε Leo	10 14.7	+23 35	6/3/3		28″		23h 20			1h 43 W
355-3180	56 U Ma	11 24.0	+43 41	6/5/3		28″		23h 48			1h W
355-3181	ρ Boo	14 30	+30 31	6/5/3		1		0h 21			1h 10m E
28298F				G40	IIa0b	13					
28295	HD 127782 HR 5655	14h 04.6m	+49° 56′	G40	IIa0b	13	22°F	01h:20	10 01 40	B	0 20
28296	HD 134776 HR 5998	15 07.5	-23 38	G40	IIa0b	13	22°F	02 00	40 03 20	C	[illegible] W
28297	HD 14[illegible]	16 01.9	-24 11	G40	IIa0b	13	22°F	03 28	26 04 20	A	0 43 W
28299	HD [illegible]	16 0[illegible]	+17 13	G40	IIa0b	13	22°F	04 32	9 04 50	B	1 15 W

Dome Temp.
Focus
Dome Temp.

Dome Temp. ....

Focus 49.8

Dome Temp. 22° (0100)

Transparency Conditions Perfect

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		2h 4m (middle)		4"	4.5	A0 IV		Ext St.	
		2h 37m (")		5	4.5	A0 IV		" at the end star a little bit out of [illegible]	
					~~4.3~~	~~F0 Ia~~			
		2h 59 W (middle)			5	Cool			
					5.3	G2 Ib			
		2h 28 W							
		2h 48 W			4.5	K4 III		at the end ✱ walked nearly out	
		2h 24m W		4"	5.5	G8 Ib			
		1h 43m W			4.0	F0 II-III			
		1h 5m W			5.5	G8 II			
		1h 32m E			4.9	K3 III			
							30/30	Focus Test	
								[illegible]	
01 [illegible]	E	0h 00	+49° 38'	0-1	6.8	M2	8-8-8	Std. Vel. #7 {9644, 9652}	fine
01 [illegible]	C	00h 42m W	−23° 40'	0	6.6	B9	8-8-8	B8 − B9 #7 {9653, 9658}	fine
[illegible]	A	0 43m W	−24° 20'	0	5.5	B8	8-8-8	B8 − B9 #7 {9657, 9651}	fine
[illegible]	B	01 15 W	−17 08	0	61	G4	8-8-8	Std. Val. #7 {9661, 9657}	fine

209 PH A Landolt.   160 visitors; showed Mars, Uranus; — V, Dm Sm.

Date Sat. April 3–4, 1965. **Observer** M Cl + Sk + RE JR **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
362										
~~3107F~~-1	31 Com	12h 50.0	+27° 44	Hp		τ = 10 sec		11h 59m		
2	η UMa	13h 46.2	+49° 29′	"			"	1h 9		
3	η Boo	13h 53.1	+18° 54′	"			"			
4	β Lib	15h 15.1	−09° 15′	"			"	2h 44m		
5	γ Ser	15h 54.9	+15° 48′	"			"	2h 55m		
6	109 Vir	14h 44.4	+02° 03′	"			"	3h 10m		
7	HR 5270	14h 00.7	+09° 52′	"			"	3 22		
8	RS Oph									

Dome Temp. 29° F

Focus

Dome Temp.

Transparency Conditions Good

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		10th (middle)						to repair transmission at spectrophotometer + fix motor to it	
		0h 4m W						Stds	
		0h 15 E							
		1h 57m							

211

Date 4-5 Apr '65 Sun-Mon **Observer** Ay - Hr Mse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P	Hour Angle End
28299	HD 47105 γ Gem	06 31.9	+16 29	G 10	IIaO b	9×2	37°F	19 20 [6]	19 32	B	0 23W
28300	"	"	"	"	"	"		19 34 [6]	19 46	A	0 45W
28301	HR 2374 HD 46075	06 26.1	+11 52	G 40	IIaO b	13	36°F	19 58 [11]	20 20	B	W2 25
28302	HR 2605 HD 51688	06 53.3	+26 83	G 40	IIaO b	13	36°F	20 26 [8]	20 42	C	[illegible]
28300 F1	focus test			G 40		13	36°F	—		A	—
28303	BD +45° 1859	10 38.2	+45 12	G 40	IIaO b	17	33°F	20 55 [93]	00 01	A	W1 54
28304	HD 114762	13 07.5	+18 02	G 40	IIaO b	13	28°F	00 09 [22]	00 52	B	W0 17
28305	BD +29° 2495	14 02.6	29 45	G 40	IIaO b	17	28°F	00 59 [43]	03 05	A	0 15W
28306	HD 131861	14 50.9	45 43	G 40	IIaO b	13	26°F	03 16 [50]	04 55	B	1 3/4
28306 T	Calibration Step Wedge				for plates		28295 - 98, 28301-06				

Dome Temp. 38 °F **Transparency Conditions** EXCELLENT

Focus 54 1/2 / 51 2/3 /

Dome Temp. 27 °F

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
19 32	B	01 27 W	+16° 26'	0	1.9	A0 IV	6-6-6	Hd #4 (30) {9673 9703	fine
19 46	?	01 45 W	"	"	"	"	6-6-6	Hd #4 (30) {9704 9734	[illegible]
20 20	B	W 2 25	+11 51	0	6.41	B8	8-8-8	B8 - B9 focus 54 [illegible] #6 (2) {9735 9737	fogged / fine
20 42	C	02 21 W	+26 59	0-1	6.27	B9	8-8-8	B8 - B9 #7 (4) {9738 9742	fine
—	9						30/30	[illegible]	[illegible]
[illegible]	A	W 1 54	+44 53	0-1	9.59	F4	8-8-8	KAFS [illegible] focus set: 51 2/3 #9 (30) {9744 9774	fine
[illegible]	A	W 0 17	+17 43	0-1	8.2	F7	8-8-8	StdVel #9 30 {9775 9805	badly fogged
[illegible]	A	01 35 W	29 26	0-1	10.00	F8	8-8-8	KAFS #9 (30) {9806 9839	fine
[illegible]	3	W 2 38	45 27	0	7.64	F3	8-8-8	KAFS THIN CLOUDS DURING [illegible] #8 15 {9840 9855	guiding
[illegible]									

- 8 [illegible] later in dome

Dome Temp.
Focus 5[illegible]
Dome Temp.

Date 5-6 Apr/65 Mon **Observer** - Hn Mse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28307	HD47105 γ Gem	06 31.9	+16 29	610	IIa Ob	9×L		19 21	19 41 [10]	B	W1 45
~~28308~~	~~HD45105~~						~~41°F~~			~~B~~	
28307 F₁	focus test			640	IIa Ob	13	41°F			A	
28308	HD89449	10 14.3	+19 59	640	IIa Ob	13	38°F	21 55	22 05 [5]	B	W1 27
28309	HD107328	12 15.3	+03 53	640	IIa Ob	13	38°F	22 13	22 31 [9]	C	E1 09
28310	BD+29°2495	14 02.6	+29 45	640	IIa Ob	17	~~38°F~~	22 41	02 41 [120]	A	[illegible]
~~28311~~	~~HD131861~~	~~14 50.9~~	~~45 43~~	~~640~~	~~IIa Ob~~	~~13~~ 17	34°F	~~02 56~~	04 46 [55]	B	W2 3[illegible]
28310T	Calibration Step Wedge for plates 28308 - 11										

8/Apr/65 - dome temp 43°F

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28310 F₁	focus test			640		13	39°F			A	[illegible]
28310 F₂	focus test			640		13	39°F			A	"
28310 F₃	focus test			640		13	38.5°F			A	"

Dome Temp. 43°F
Focus 56 / 54⅔ / 54
Dome Temp.

Transparency Conditions VERY POOR AT START - MUCH CLOUDS IN S.W. #?. Haze getting thicker from c 3 on

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
19 41	D	W1 45	+16 27	0-0	1.9	A0 IV	6-6.6	Hd. #4[30] {9858 / 9888}	fine.
	~~B~~								
	A						30/30	focus set 56 (BEFORE #26 30s)	sl c to r
								CLOUDING	
22 15	B	W0 27	+19 40	①	5.3	F5	8-8-8	Std. Vel. focus 56⅔ #7[9] {9893 / 9900}	fine
22 31	C	E1 08	+03 30	0	6.1	K1	8-8-8	Std Vel #7[8] {9907 / 9909}	guiding
22 41	A	0116W	29 27	0	10.00	F8	8-8-8	KAFS #9 {99.. / 9927}	
~~06-0?~~	~~B~~	~~W2 35~~	~~45 26~~	~~0~~	~~1.64~~	~~F3~~	~~8-8-8~~	~~KAFS~~ focus set 54 #8 {9938 / 9987}	nothing
								+ LOST CAUSE - ? - GUIDE	
								EUID... DEVICE CAME UNATTACHED AFTER TO EXP.	
	A	1½ hr					50/50	focus set 56	c ...
	A	"					50/50	focus set 57	sl c to r
	A	"					50/50	focus set 58	fogged, focus OK

215

PN 5 B8 C (G 53) loaded

Date Fri Apr 9-10/65 **Observer** Hd V Mt **Julian Day** ....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28311	γ Gem	6 31.9	+16 29	G10	IIaOB.	L 9	38	20 00 [7]	20 14	A	W 2 33
28312	"	"	"	"	"	9 x L		20 18 [18]	20 44	B	W 3 03
28312 F	Focus test				~~[illegible]~~	9		in in / out out		A	
28313	HD 81797	9 22.7	−8 14	"	"	9L	37	21 08 [31]	22 10	C	W 1 39
28313 F	Focus test			"	"	9				B	
28314	HD 107328	12 15.3	+03 53	G40	IIaOB	13	34	22 45 [19]	23 23	B	00 31 E
28315	HR 5257 HD 122[illegible]	13 42.6	−2[illegible] 12	"	"	17	34	23 47 [23]	00 32	C	00 31 W
28316	HD 123782	14 04.6	+49 56	"	"	13	34	00 45 [8]	01 00	A	0 11 E
28317	HD 130044	14 40.7	+15 36	"	"	13	34	01 13 [16]	01 [illegible]5	B	[illegible]
28318	HR 5855 HD 1[illegible]	15 27.5	−2[illegible] 38	"	"	"	34	02 00 [30]	03 00	C	[illegible] W
28319	HR 5912 HD 14[illegible]301	15 42.7	−23 57	"	"	"		03 09 [17]	03 43	A	1 15 W
~~28320~~	~~HD [illegible]~~	~~16 13.8~~	~~−23 25~~	~~"~~	~~"~~	~~"~~				~~B~~	
28319 T	Calibration Step Wedge for plates 28314–19										

Dome Temp. ....

Transparency Conditions little hazy

Focus ....

Dome Temp. ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W 2 33	+ 16 28	1	1.9	A0 IV	6-6-6	1st Sp Run. sec 4 {9950 9965	out of focus
W 3 03	"	1.0	"		6-6-6	" 4 {9967 9997	out of focus.
					30/30	Plate broken	center to [illegible]
W 1 39		1	2.2	K5	6-6-6	Std Vel Can't understand why it took so long. 4 {1997 0025	out of focus
					30/30.		[illegible]
00 01 E	+ 63 31	0	5.1	K1	8-8-8	Std Vel. Set Focus 54 7 {0022 [illegible]	fine
[illegible] 37 W	- 24 37	0-1	[illegible]	B9	6-6-6	B8-B9 8 {[illegible]4 [illegible]	weak.
0 12 E	+ 47 37	1-2	6.8	M2	8-8-8	Std Vel. 8 {0045 0065	[illegible]
0 04 E	+ 45 19	1	7.64	F3	8-8-8	8 {0066 00[illegible]1	good [illegible]
0 [illegible] W	- 23 51	0	6.6	B9	8-8-8	B8 - B9 (blew a fuse) (2 buttons at once) 7 {00[illegible]2 0035	good [illegible]
0 45 W	- 25 07	0	6.2	B9	8-8-8	B8 - B9 7 {0087 0091	[illegible]
			~~5.9~~	~~B9~~		~~B8 - B9~~ ~~7 {0092 00[illegible]3~~	

03 50 ; Handle to uncap plate not working. Closed up.

Repaired Longworth

217 PH A, B, C loaded   Saturday April 10, 1965 150 visitors showed the moon Cn, Fl, Dm

Date 12 Apr /65 **Observer** M se **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28319 F_1	focus test			G10	IIa O6	9	36°F			A
F_2	focus test			G10	IIa O6	9				A
F_3	focus test			G10	IIa O6	9	35°F			A
F_4	focus test			G10	IIa O6	9	35			A
F_5	focus test			G10	IIa O6	9	35			B
F_6	focus test			G10	IIa O6	9	35			C
28319 F_7	Focus			G10	IIa O6 unb.	9	32 F			A
F_8	"			"	"	"	"			A
F_9	"			"	"	"	33			A
28319 T_2	Sky Spectrum		Blue sky about T3 p.m. near zenith	"	"	"	33	sky:	15 s	A
F_{10}	Focus			"	"	"	33			C
F_{11}	Focus			"	"	"	36			A

Dome Temp. 40 °F

Focus ....

Dome Temp. 39 °F

Transparency Conditions ....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
								D-19 DEVELOPMENT		
	A	1h 2hr W					60/60	focus set to 1.5 from 2.0		c → R
	A	"					60/60	focus set to 1.0 from 1.5		v sl c → R
	A	"					60/60	focus set to ~~0.0~~ 0.0 from 1.0		[illegible]
	A	"					60/60	focus set to -1.5 from 0.0		[illegible]
	B	"					60/60	same	Entire B & C for consistency	
	C	"					60/60	same	with P.H. A	[illegible]
								focus set to -8.0 from -1.5 (moved 1.5 divs to smaller number)	no test made	
	A		In in/out out				60/60.	focus 8.0	c to R by 15μ	
	A		" "				60/60	" 6.0	c to R by 6μ. ∴ correct setting should be 4.7	
	A		" "				60/60	" 4.7	c to R again! by ~~[illegible]~~ 13μ!	
155	A		"				15s	shows bad image on sky sp.		
	C		" "				60/60	Focus 4.7 Diff. P.H.	c to R. by ~~[illegible]~~ 34μ!	
								Maybe I didn't turn far enough for the backlash.		
								Anyway, I reset again at 4.7		
	A						60/60	Focus 4.7	c to R by 13μ	

all measures of displacement made at 3930.

Very unsatisfactory! Why the discrepancy between F_8 + F_9? Perhaps because the telescope was moved to 40 min ~~[illegible]~~ East in order to get the sky?

Date 13-14 Apr/65 Tues-Wed **Observer** ~~[illegible]~~ F/ Mt Myr **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
28319 F_{12}	focus test	—	—	G40	IIa0b	13	38°F	—	—	A
~~28320~~	~~HD 47107~~	~~06 34.6~~	~~+5 50.7~~	~~G40~~	~~IIa0b~~	~~13~~	~~38°F~~	~~19:55~~		~~B~~
28320	HD 47107	06 31.9	+5 53	G40	IIa0b	13	38°F	20:20	35 21 30	A
28321	BD +45°/1753	09 36.7	+46 20′	G40	IIa0b	17	36°F	21 42	89 00 40	B
28322	HD 130044	14 40.9	+45 36	"	"	13		00 55	19 01 32	C
28323	HD 1?5?77	16 01.5	+39 24	"	"	13		02 05	21 02 46	A
28324	HD 161306	17 39.7	−09 46	G40	IIa0b	17	32°F	02 58	46 04 29	B
28324 T5	Calibration Step Wedge				for plates #28319 F_{12} – 24					
28324 F1	Focus test		+30°	G10	IIaO	9	35°F			A
F2	"		"	"	"	"	"			A
=3 T1	Sky spectrum	Rain across slit	"	"	"	9	35°F			A
=4 T2	"	"		G40	IIaOB	4	50°			A
=5 T3	"	"		G40	"	4	50°			A
=6 T4	"	"		G10	IIaO	9				A

Dome Temp. 43° F
Focus 58 / 55 / 53 1/2 /
Dome Temp.

Transparency Conditions (moon near full) excellent

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	A						30/30	focus set 58	
	B				7.7	0B	8-	FINDER ... WRONG STAR #9 ~~29 ... 0127~~	
	A	W 4 06	+5 52	0	7.7	0B	8-8-8	I Mon (SK) FIELD DRAWN #9 29 {0100 0129	fine
	B	W 4 12	+5 13	0-1	9.87	A2V	8-8-6	KAFS (Hd) Focus set to 55 FIELD DRAWN 37°F #9 {0131 0159	fine
	C	0 00	+45 20	1	7.64	F3	8-8-8	#8 15 {0159 0174	fine
		E 0 06	+39 15	0-1	7.2	G8	8-8-8	Std Vel #8 15 {0176 0191	fine
	B	E 0 02	-9 47	0	8.77	Be... (III-V)	8-8-8	Gr. Be focus 53 1/2 #9 (30) {0192 0222	
	A	0h 00 W	Sn-Sn / Cent Bent				60/60	Focus 0 (on the fine scale)	FOGGED
		"	"	"			60/60	FOCUS 3 (" " " sl.) fogged	OK
	A	"	1				15	Missing - between dome and administration building DOUBLE IMAGE OF HAIR	
							2^s	FOCUS 59	fogged
			(shutter 2' open)				6^s	FOCUS 59	ONE IMAGE
		1/2 of corrector covered					30^s		ONE IMAGE

Date 14-15 April/65 Wed/Thurs **Observer** Hb Msc **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28325	8 Gem HD47105	06h 31.9m	+16°29'	G10	IIaOb	9 x2	50°F	~~20 34~~ 19 34.6	2006	A
28325 F,	focus test	—	—	G10	IIaOb	9	48°F	—	—	A
~~28326~~										

Sat Apr 16/65 Hd.

I have an idea that the failure to hold focus on direction we have been doing, i.e. in pushing PH's change the focus. If this is so we should set the i.e. to smaller numbers. So I set this

28325 F2	focus test			G10	IIaO	9	30F			A
28325 F3	"			"	"	"	"			A
28325 F4	"			"	"	"	"			A

Focus 2.80 looks good (with eyepiece). Others are c to
So I reset to 2.80 by turning up to 3.6 and then —

Dome Temp. 51 °F

Transparency Conditions very poor

Focus

Dome Temp.

P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
A	02 45 W	+16° 29'	E	1.9	A0 IV	6-12	Hd Sp Bin — CLOSED UP DUE TO CLOUDS — (30) 02 30 / Ans4 02 41	exposure OK but comp lines are wide
A	—	—	—	—	—	30/30	plate broke during exp.	c: toned (for what it is worth)

ALL UNEXP. PLATES IN REFRIGERATOR

G 10 may result from taking up slack in the home we may slip the clamp and so focus always by turning the knob counter clockwise in this way in the following.

P.H.	Sp.	Comp.	REMARKS	Quality
A	no filter	5/5	set focus 2.80 (2 on course scale, 80 on fine scale)	best
A	"	5/5	" " 2.40	[illegible]
A	"	5/5	" " 2.00	[illegible]

vi (significantly perhaps(?) the point we have had for some time) back (counterclockwise) to 2.80 let us see if it will repeat.

Sat. Nite: ~160 persons: Showed Mars in 74": Fl, Ck, Cc

223

Date Sun Apr 18-19 / 65 **Observer** Hd – Hr Mse **Julian Day** ....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28325 F5	Focus	in - in	/ out out	G10	IIaO B	9	35 F			A	
28326	HD 78362	09 02.7	+63 55	G10	"	9		19 56	93 23 02	A	W 3 24 6
28326 F	focus	in in	out out	G10	IIaO	9	33°F			A	
28326 T1	Sky Spectrum	hair across slit		G10	IIaO	9	32°F			A	Shell..
T2	" "	" "		G10	IIaO	9	32°F			A	
T3	"	"		"	"	"	"			A	
F2	Focus Test	In-in / out out		"	"	"	"			B	
T4	Sky Spectrum	hair across slit		G10	IIaO	9	35°F			A	"
T5	"	"		"	"	"	"			A	
F3	Focus Test	In-in / out-out		"	"	"	"			B	

Perhaps the difference of focus between spectrum edge and spectrum — so we placed a piece of shim stock supposedly touching the slit

T6	Sky + vision arc full aperture			G10	IIaO	9				A	

Dome Temp. 40

Focus 2.80

Dome Temp. ....

Transparency Conditions very good
2100 – a thin haze appearing overhead ~ 1/2 mag. dimming

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	A		no filter				5/5	setting unchanged at 2.80	
3 12	A	W 3 24	63 38	0	4.74	F5[illegible]	8-8-8	Interstellar line prov. ? towards it — mags 0245 0290 — counts coming pretty slowly	fine o.k.
	A						30/30	same setting	
	A	Shutter 2' open					45	Focus 2.80 — Focus appears good 2 IMAGES	
	A	"					45	Focus 1.0 C to Vi — Focus poor ONE IMAGE!	
	A	"					50	Focus 2.0 — ONE WIDE IMAGE	
	C						12/12	(No Filter) Focus 2.0 C to Vi	
	A	"	CORRECTOR TURNED AROUND SO THAT CURVED FACE (?) TOWARD MIRROR				60	FOCUS 2.0 — similar to #3	
	A	"		"			45	FOCUS 2.80 — similar to #1	
	B			" (no filter)			12/12	FOCUS 2.80	good

...ing and spectrum line is due to the 1 mm (approx) by which the decker clears the slit jaws
...g touching the slit jaws and covering part of the star window and all of it on one side

	A				no filter		25	Focus 2.80 — It still shows doubling weak	

363 **Date** 19-20 April/65 Mon-Tues **Observer** Rr - Hs Mse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28327	HD 47984	06 36.1	+6 13	G 40	IIa Ob	13	39°F	19 49	31 20 51	A
28327 F,	focus	in - in/out out		"	"	"	37°F	———	———	B
28328	ρ Leo HD 91316	10 27.5	+09 49	G 10	IIa Ob	9 XL	35°F	21 06	68 23 22	A
28328 F,	focus	in in/out out		G 10	IIa Ob	9		———	———	B
3~~16~~ - 3182	α Leo 87901	10 6.5	+12 9					11 37		
28329	HD 131861	14 50.9	+45 43	G 40	IIa Ob	13	33	00 21	62 02 25	C

28329 T, Calibration Step Wedge for plates 28327, 28329.

Dome Temp. 40°F
Focus 47½ / 53
Dome Temp.

Transparency Conditions poor at start then clearing
0210 Clouds

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	A	W3 46	+6 10	0	7.2	A2 Ib	8-8-8	(5K) I Mon FINDER FIELD (NOTE BELOW) #9 (12) {0292 0317}	fogged good exposure guiding?
	B						30/30	focus 47½	O.K
	A	W2 26	+9 31	0-1	3.85	B1 Ib	8-8	Interstellar line prog. ~~#5~~	guiding
	B						30/30		O.K
								I am sorry it is definitely not photometric	
	0	0108W	45 26	0-1	7.64	F3	8-8-8	KAFS focus at 53 #9 (33) {0345 0373}	fine but fogged

WHERE IS THE SAFETY CHAIN FOR G40 PLATEHOLDERS??

NOTE: FINDER FIELD FOR E 2832 ? — THERE IS A LARGE DISCREPANCY BETWEEN THE 6" FINDER & THE MAIN INSTRUMENT

227 1 hr work on 2-ch. phot. at start

Date 20-21 April /65 Tues - Wed **Observer** Vdb - Mt (V, SK, Mse) **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
364									
~~357~~ - 3183	α Leo	10 06.5	+ 12° 09		5-5-2	28		20:30	
3184	ε Leo	9 44.0	+ 23° 56'		6-5-2	28		21:03	
3185	ζ Leo	10 14.7	+ 23 35		6-3-2	28		21 32	
3186	ι Cnc A	8 44.6	+28 54		6-4-2	28		21 58	
3187	ι Cnc B	"	"		6-5-3	28		22 23	
3188	7792	9 43	+38 36		6-4-3	28		22 56	
3189	56 U Ma	11 21.0	+43 [illegible]		6-4-2	28		23 18	
3190	ρ Boo	14 30.2	+30 31		6-4-3	28		00 00	
3191	R CB	15 47	+28 34		6-6-3	28		0 41	
3192	HR 6050	16 10.5	+42 28		7/4/3 6/6/3	5 Ry		1 32	
3193	β Dra	17 29.7	+52 20		5/5/3	28		2 16	
3195	ξ Dra	17 52.9	+56 52		5/6/3	28		2 41	
3196	ζ Her	17 55.0	+37 15		5/6/3	28		3 08	
~~3197~~	~~ν Her~~	~~17 57.2~~	~~+30 12~~		~~5/4/3~~	~~28~~		~~3 45~~	
3197	89 Her A	17 54.0	+26 3		6/6/3	28		3 45	
3197'	A'				6/6/3	28		4 20	

Dome Temp. 42°

Focus

Dome Temp. 36°

Transparency Conditions excellent

Ending Time E.S.T.	P.E.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		0ʰ 10ᵐ W			1.3	B7 V			
		1ʰ03+1ʰ13 W			3.1	S0 II			
		1ʰ 6ᵐ W			3.6	F0 III			
		3ʰ 2ᵐ W			5.0	G8 I			
		3ʰ 21ᵐ W			6	B3 V			
		3ʰ 35ᵐ W			5.5	G8 Ib			
		1ʰ 40 W			6.0	G8 II		deep l. [illegible]	
		0ʰ 43 E			4.8	K3 III			
		1ʰ 14 E			6 var	cG0			
		0ʰ 34 E			5.9	K4 II		moon	
		1ʰ 25 E			2.8	G2 Ib		[illegible] incl. faint comps	
		1ʰ 23 E			3.9	K2 III		Cirrus + cloudy, condensation	
		0ʰ 54 E			3.8	K1 II			
		0ʰ 1			4.4	F2 II			
		0ʰ 17ᵐ E			5.4	F2 Ia		ice, paper	
		0ʰ 13ᵐ W							

Date 22 - 23 April /65 Thurs - Fri **Observer** – Rc Mse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
28330	ρ Leo HD 91316	10 27.5	+09 49'	G10	IIa0b	9 xL	42°F	20 20[8]	[7] 23 14	A
~~28331~~	~~HD 119476~~	~~13 38.4~~	~~65 20~~	~~G10~~	~~IIa0b~~	9 normal [illegible] length				B
28331	HD 119476	13 38.4	65 20	G10	IIa0b	9 normal	41°F	23 52	[25] 00 42	B
28331 F₁	focus test	in in / out out		G10	IIa0b	9		—	—	A

Dome Temp. 47°F

Transparency Conditions poor - at best [illegible]

Focus

Dome Temp.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2314	A	W 2 30	+09 29	0-1	3.85	B1Ib	8-8-8	~~plate broke during exposure~~ INTERSTELLAR LINE PROG #5 {0420 0470	guiding
	B				5.70	B9n		#6	
[illegible]42	B	W 0 51	64 59	0	5.70	B9n	8-16	CLOUDS - CLOSED " " TP #6 (2) {0474 0476	very weak
	A						30/30	0/180	O.K.

→ SK attempted photometry but chart recorder is not working

nearly impossible to turn dome east of meridian - cable just slipping

231

365 **Date** 23-24 April/65 Fri-Sat. **Observer** Hb - Mt SK **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28332	HD104337	11h 55.7	-19° 06'	G10	IIaOb	9x2	42°F	20 49	59 22 47	A	00 39W
28332 F	Focus test			G10	IIaOb	9		in / out		B	
~~332~~ -3198	α Leo	10 6.5	+12 9	[illegible]	5/4/3	28"		23 08			
								23 15			[illegible]
-3199	56 UMa	11 17.4	+44 02		6-5-3	28"		23 42			[illegible]
28333	HD 158650	16h 31.0	+61° 02	G10	IIaOb	9	35°F	00 45	113 02 30	C	[illegible]

Dome Temp. 41 °F
Focus
Dome Temp. 34°

Transparency Conditions 2000 Poor. Scattered Clouds 5c
2145 – (good)
0100 Excellent (no cloud)

Ph: C (610) loaded in N. Pier

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	A	00 39 W	−19° 27′	0	5.28	B5	8-20	Interstellar line{s} [Münch Std] trans 5 (60) {0481 0541}	weak
	B						30/30		
					1.33	B7 V		clouds, very hazy	
		$3^h 16^m$ W							
		$2^h 33^m$ W			5.0	G8 II		thick clouds FINIS	
	C	$1^h 40^m$ W	+60 55	0	5.85	A1 n	8-8-8	Interstellar line Pgm. seus 6 {492 504}	[illegible] weak guiding

233

366 **Date** 24/25 April '55 ... **Observer** Re - McL **Julian Day** ...

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
1	M3	Serge looked for W Vir stars in M3								
3~~58~~ T ①	η Boo	13h 53.1	+18°34′		τ =	10 sec		01:00	01:45	
28334	60 Her HD 152[illegible]	17h 00.7m	12°53′	610	[illegible]	7x1	32°	2h26	4h28	A

Dome Temp.
Focus
Dome Temp.

Hour Angle End
Tested
W 14

Dome Temp. 34°

Focus ....

Dome Temp. ....

Transparency Conditions Cleared at 22:30
Variable clouds at 23:00 – 23:45
Clear again at 24:00

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]:45		tested photometer with star in various positions in diaphragm.							
[illegible]	A	W 1^h 19	+12°47'	1	4.91	A3 V	8-8-8	Interstellar line Prog. sens #5 { 507 / 529 [plate found broken upon unloading [illegible] – may have broken in unloading –	good exposure

[Exposure meter very slow – maybe not working right ?]

Thalf: VRH Run on "Pluto Event" VH, Hr, & Halliday

235

Date 27-28 Apr/65 **Observer** - F.l. Ap[illegible] **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28334 F	focus test	in in /	out out	6,42	IIaOb	13	41°F	—	—	A	—
28335	HD 142 184	15 48.0	-23 41	6,40	IIaOb	13	41°F	23 51 (52)	01 35	B	0 10E
28336	HD 161306	17 39.7	-09 46	6,40	IIaOb	17	42°F	01 46 (47)	04 20	C	0 4W
28336 T	Calibration Step	Wedge			for plates 28335-36						

Dome Temp.

Focus

Dome Temp.

Dome Temp. 42°F

Transparency Conditions excellent

Focus

Dome Temp.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
—	A	—		—	—		30/30	focus set 59	c to vi
[illegible]	B	0 10E	-23 50	0	5.37	B3 Ia e	8-8-8	Cn - Be focus set 58 #8 {0548 0558	fine
[illegible]	C	0 44W	-09 47	0	8.77	B1e [IV-V]	8-8-8	Cn - 8 e one large cloud overhead. #9 {560 583	[illegible]

237 1st half Pluto Obs. vdB, Ha, Mee

Date 28/29. Apr 65 **Observer** SK, Hr, Mee **Julian Day**

367

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
359-3200	α CrB	15h 33.1	+26° 50′	5	-4-3	28″		01h 08m		
3201	HR 6050	16 10.5	+42 28	7	-4-3	28		01h 48m		
3202	π Her	17 14.0	+36 53	6	-4-3	22″		02 22		
3203	89 Her	17 54.0	+26 3		6-5-3	28″		02 47		
3204	ν Her	17 57.2	+30 12		6-4-3	28″		3 20		
3205	9 Her	17 55.0	+37 15		6-5-3	28″		3 46		
3206	β Dra	17 29.7	+52 20		6-3-3	28″		4 12		

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. 42° F

Focus

Dome Temp. 38° F

Transparency Conditions excellent

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
$0^h 0^m$			2.2	A0 V			
$0^h 4^m$			5.9	K4 V			
$0^h 32^m$ E			4.5	K3 V			
$0^h 24^m$ E			5.8	F2 Ia			
$0^h 16^m$ E			4.5	F2 II			
$0^h 12^m$ W			4.0	K1 II			
—			2.8	G2 Ib			

Date 29/30 Apr **Observer** vB / Mse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
368-3207	α Leo	10 6.5	+12° 09'			4/5/28	I=2	2105		
368-3208	3C273	12 27.3	+02 15			8/5/75	I=2	2140	+ sky	
368-3209	"	"	"			"	"	2217		
368-3210	"	"	"				"	2253		
368-3211	"	"	"			"	"	2306	+ sky	
28336 F1	focus test			G40	IIa 0b	13	48°F			A
28337	HD131861	14 50.9	+45 43	G40	IIa 0b	13	47°F	23 50 (15)	0 20	B

Dome Temp. .... CO_2 lin } 1900 Transparency Conditions Fine

Focus .... V700 }

Dome Temp. .... 2300 isolated Clouds
0000 getting worse windy NW

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		01h 25W		2"	11.33	B7+		Ext. ST	
		0h 30W		3"	12.7	QSO			
		0 10W		4"	"	"		Small cl, drifted out	
		01 00W							
	A						30/30	focus set: 59 ~~#9 05490~~	
20	B	E 0 20	45 28	0-1	7.64	F3	8-	KAFS DON'T EXPECT ANYTHING ON PLATE – CLOUDED OUT #9 { 05490 φ2	weak

241

Date 30 April / 1 May 1965 Fri/Sat **Observer** HL **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
28338 F	Focus Test			G-40	IIaOb	13	56°F	in in / out out		C
28338 F2	Focus Test			G40	IIaOb	13	55°F	in in / out out		A
28338 F3	Focus Test			G40	IIaOb	13	55°F	in in / out out		B
28338 F4	Focus Test			G40	IIaOb	13	55°F	in in / out out		C
28339	BD +29° 2495	14h 02m.6	+29° 45′	G40	IIaOb	17	54°F	21 15	22 45	A
28338 F5	Focus Test			G40	IIaOb	13	50°F	in in / out out		B
2 May/65 (Sun)										
28338 F6	focus test			G40	IIaOb	13	55°F	in in / out out		A

Dome Temp. 56°F
Focus ....
Dome Temp. ....

Transparency Conditions Thin AS
Poor
2230 + clouds

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	C		Clouds				30/30	Focus setting #61	v sl. c to r
	A						30/30	Focus setting #61 (#62 good?)	v sl. c to r
	B						30/30	Focus setting #59	c to r
	C						30/30	Focus setting #63 v sl.	c to v
		01 03E	+29° 26'	—	10.00	F8	8-16	KAPs Binaries CLOUDS' Focus 62 FIELD ~~9^45 {0?? 064~~	[illegible]
	2						40/40	Focus setting #60	[illegible]
								Closed up 0010 EST	[illegible]
	A	01 W					40/40	focus set 62	v sl c to r

May 1st, 65: 180 visitors – showed Ranger VII film; Gd., Ck; Sm.

243

Date May 2-3, Sun-Mon, 1965 **Observer** Fl – Zy se **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I
28339 (8)	HD 103095	11 47.2	+38 26	G40	IIaOb	13	52°	21:32 / 22:59	21:42 / 00 34	B
28340 (39)	HD 136202	15 14.2	+02 09	G40	IIaOb	13	50°F	00 39	01 53 (44)	C
~~28341~~	~~HD 161701~~	~~17 47.9~~	~~14 42~~	~~G40~~	~~IIaOb~~	13				B
28339 F1	focus test	in in/out out		G40	IIaOb	13				B
28339	Calibration Step Wedge									
3 May/65										
28339 F2	focus test	in in/out out		G40	IIaOb	13	67°F			A
F3	"	"	"	"	"	1	"			A
28339 T2	Sky spectrum G10 with hair (J. Topley's) across slit and actually in contact with the jaws.									A

Dome Temp. / Focus / Dome Temp. / Hour Angle End: 00:17W, W3 09, W1 02

"variable cloudiness"

Dome Temp. 56°F

Focus 62

Dome Temp. 49°F

Transparency Conditions POOR High Cirrus — 00 00 - ~1 mag absorption

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2:42 / 00 34	P	00:17 W / W 3 09	37 59	0	7.3	G5	8-8-8	Focus 62 Std. Vel. Star exposure halted at 21:42 (clouds) Sens 8 (15') {605 629	fine
01 53	C	W1 02	+01 55	0-0	5.6	G0	8-8-8	std Vel patchy clouds #6 (3) {627 624	fine
~~B~~					~~6.05~~	~~B9~~		~~B3-B4 Poor~~ (10) #8 {625 635	
	B						30/30		OK
								CLOUDS SOLID BY 0215	
	A						30/30	dome 71°F focus set 67	[illegible]
	[illegible]						50/50	" 70°F "	OK
[illegible]	K							The hairline is double !!	
								UNEXPOSED PLATES IN REFRIG.	

R.A.S.M. Button Replaced - Hr

Date 5-6 May/65 Wed - Thurs **Observer** SK - Hr Mpc **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
369-3212	ε Gem	06 37.8	+25 14	4-4-3		28"		20h 9m			
369-3212	ι Cnc A	8 44.6	+28 54	6-4-3		(28")		20h 09			3h 12m W
369-3213	ι Cn B	"	"	7-5-3				21 25			3h 32m W
369-3214	β Dra	17 29.7	+52 20					22h 3			
28340	HD 131861	14 50.9	+45° 43	G40	IIaOb	13"	54	22h 37	55 00 27	A	00 11 W
~~28341~~	~~HD 142184~~	~~15 48.0~~	~~-23 41~~	~~G40~~	~~IIaOb~~	~~13~~				B	
369-3215	α CrB	15 33.1	+26 50	5-4-3		28"		1h 16			0h 32m W
369-3216	β Dra	17 29.7	+52 20	6-3-3		28"		1h 57			1h 45m E
369-3217	161796	17 44.1	+50 05	6-6-3/4		28"		2h 25			0h 30m E
369-3218	γ Oph	17 50.2	-6 8.	7-5-4		28"		2 59			
28341	HD 176318 (HR 7174)	18 54.6	38 07	G40	IIaOb	13	46°F	03 20	5 03 30	B	E0 48
28342	HD 161701 (HR 6620)	17 41.9	-14 42	G40	IIaOb	13	"	03 38	7 03 51	C	W0 44
28343	HD 186147 (HR 7511)	19 40.0	+13 03	G40	IIaOb	13	"	03 55	8 04 10	A	E0 55
28343 T	Calibration Step Wedge - for plates 28340 - 43										

Dome Temp. 62°F
Focus
Dome Temp.

NB Ring for slit setting slips
SoT 20 gives same resolution as 28 used to

Transparency Conditions ~~fair at start~~ - poor
excellent after midnight

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			25 12		3	G8Ib		diaphragm had to be set after, slit open	
		3h 12m W			4.0	G5I		adapted	
		3h 32m W			5.8	B9I		clouds	
					2.8	G2Ib		clouds, finished	
ec 27	1	00 11 W	45 27	0-0	7.64	F3	8-8-8	KAFS B series [focus 62½, improved seeing] # 9 {(33) 0634 0664, (10) 0665}	fine
	2				~~5.37 33 [?]~~			~~Cn - OC~~ ~~# 8 {0665 0675}~~	
		0h 32m W			2.23	A0I		Std photometric conditions, but not excellent	
		0h 45m E			2.8	G2Ib			
		0h 30m E			7.0	F2Ia		(photometrically!)	
					6.4	F2Ib		all clouded over: 3h 12m EST	
03 30	B	E 0 48		1	5.7	138	12-12	138-139 (focus 54) #7 - 3 counts	fine
03 51	C	W 0 44	-14 43	0-1	6.05	139	8-8-8	138-39 " #7 {0676 0679}	guiding
04 [illegible]	A	E 0 55	+13 13	1	6.07	138	8-16	138-139 clouds & daylight #7 {0679 ~~0682~~ 0680}	poor guiding

unexposed plates in refrigerator

Date .... **Observer** .... **Julian Day** ....

May 7, 1965

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
$28343T_2$	Sky			640		9			1 min	
$28343T_3$	"			"		"			4 min	

Dome Temp.
Focus
Dome Temp.

Hour Angle End
0^h
0^h

Dome Temp. ....

Transparency Conditions ....

Focus ....

Dome Temp. ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0^h						hair on slit — single image of hair.	
0^h						" " " " "	

Sat. Nite: Showed Moon to ~180 visitors (through 74") Fl, Rc, Ce.

249

Date May 8/9 **Observer** SK **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
370-3219	α CrB			5-5-3		28"		13h42	1h7mW		
370-3220	β Dra			6-~~4~~-3		28"		14h7	50m E		
370-3221	161796					28"					

Dome Temp.

Focus

Dome Temp.

Dome Temp. 60 °F

Transparency Conditions extremely hazy

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		very bad	2.2	A0 V		1st switched on	
			2.8	G8 Ib		very hazy, trouble with ink	
			7.0	F2 Ia		rectasc. stuck, no unclamping possible (don't know how)	

Date May 11/12 Tu/We **Observer** McC + vB Mal **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
									cont'd at obs.	
371 -1	HD 96833	11 07.5	+44 42		I=10°	38"		09 00	21 27	
2	"	"	"		"	"			21 34	
3	HR 4534	11 47.2	+14 47		I=10	= 38			21 50	
4	HR 4540	11 48.8	+01 58		10	38			21 59	
5	HR 4550	11 50.5	+38 05		10	38			22 08	
6	HR 4662	12 13.6	-17 20		10	38			22 19	
7	HR 5019	13 16.5	-18 06		10	38			22 25	
8	HR 4983	13 10.2	+28 04		10	38			22 34	
9	HR 5072	13 36.6	+13 59		10	38			22 45	
10	HR 5235	13 52.9	+18 35		10	38			22 52	
11	HR 5062	13 23.7	+55 10		10	38			23 03	
12	HR 4931	12 59.1	+56 34		10	38			23 12	
13	HD 96833	11 07.5	+44 42		10	38			00 29	
14	HR 4550	11 50.5	+38 05		10	38			00 44	
15	HD 96833	11 07.5	+44 42		10	38			00 48	
16	HD 4983	13 10.2	+28 04		10	38			01 07	

Dome Temp. .... CO_2 i -

Focus .... 700 V

Dome Temp. ....

Transparency Conditions very Fine

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1h 19W			3.01	K1 III		Testing A4, A5, B5 / A4 ?	
1 26W						V B U / C4	
1h 04W			2.14	A2 V		A2, A1, A4	
1h 10W			3.61	F8 V		B1, A5, B3	
1h 16W			6.45	G8 V		C1, C1, C4	
1h 05W			2.60	B8 III		A1, A3, A5	
0 09			4.75	G6 V		B3, B3, B6	
0 24			4.28	G0 V		B2, B1, B4	
0 14			4.98	G5 V		B3, B3, B6	
0 00			2.69	G0 V		A3, A3, A6	
0 39			4.01	A5 V		B1, A5, B3	
1 13			4.93	F2 V		B3, B2, B5	
W 4 24			3.01	K1 III		[illegible], A5, B5	
W 3 55			6.45	G8 V		B6, B6, C4	
W 4 48			3.01	K1 III		A4, A5, B5	
W 2 59			[illegible]	[illegible]		B2, B2, B5	

1° α Clamp does not unclamp

2° δ slow motion broke down

Date May 11-12 Cont'd **Observer** Hr Mcl **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
371 - 17	HD 96833	11 07.5	+ 44 42		τ = 10	θ = 38"		0126			5 20W
18	"	"	"		"	"		0148			5 42w
19	"	"	"		"	"		0156			5 50W
20	HR 4550	11 50.5	+38 05		"	"		0215			5 27W
21											

Dome Temp.
Focus
Dome Temp.

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions EXCELLENT

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		5 20W							
		5 42W						Integrator #1 Malfunction. Fixed	
		5 50W						R.A. Clamp Sw. ″	″
		5 27W						HV	

Date 12-13 May Wed-Thurs **Observer** Cn. Mse **Julian Day**

Dome Temp.
Focus 6
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28344	HD 98262 ν U Maj	11 13.1	33 38	G40	IIa Ob	13	63°F	20 54 (2)	20 55	A	W 0 44
28345	"	"	"	"	"	"		20 56 (4)	21 00	B	W 0 49
28346	HD 111812 31 Com	12 46.8	28 05	G40	IIa Ob	13	62°F	21 08 (8)	21 16	C	E 0 30
28347	"	"	"	"	"	"		21 17 (2)	21 33	A	E 0 12
28348	HD 114710 β Com	13 07.2	28 23	G40	IIa Ob	13	61°F	21 36 (4)	21 40	B	E 0 25
28349	"	"	"	"	"	"		21 42	21 49	C	E 0 1[illegible]
28350	HD 116842 80 U Maj	13 21.2	55 31	"	"	"		21 55 (2)	21 56	A	E 0 23
28351	"	"	"	"	"	"		21 58	22 02	B	E 0 18
28352	HD 123299 α Dra	14 01.7	+64 51	"	"	"		22 11 (2)	22 13	C	E 0 45
28353	"	"	"	"	"	"		22 14 (1)	22 18	A	E 0 40
28354	HD 126660 θ Boo	14 21.8	52 19	"	"	"	60°F	22 23 (2)	22 25	B	E 0 53
28355	"	"	"	"	"	"		22 26 (2)	22 30	C	E 0 48
28356	HD 127665 ρ Boo	14 27.5	30 49	"	"	"		22 37 (4)	22 41	A	E 0 47
28357	"	"	"	"	"	"		22 42	22 50	B	E 0 25
28358	HD 127762 γ Boo	14 28.1	38 45	"	"	"		22 53 (1)	22 53.5	C	
28359	"	"	"	"	"	"		22 55	22 57	A	E [illegible]

Dome Temp. 67°F

Transparency Conditions ~~poor~~ - considerable cloud.

Focus 65½ | 64½ - 1

Dome Temp. 57°F

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
20 55	A	W 0 44	33 18	1	4.86	F2 V	24	MK standards focus 65½ - #6 {1½ cont.	fine.
21 00	B	W 0 48	"		"	"	"	" #6 {3 cont.	[illegible] faulty [illegible] great exposure
21 16	C	E 0 30	27 45	1	5.63	G0 III	8-16	" #6 (1.5) {0696 0697½	fine
21 33	A	E 0 12	"	1	"	"	8-8-8	" #6 (3) {0698 0701	strong
21 40	B	E 0 25	28 05		4.85	G0 I	8-16	" #6 (1.5) {0701 0702.5	guiding
21 49	C	E 0 16	"		"	"	8-16	" #6 (3) {0703 0706	strong.
21 56	A	E 0 23	+55 12		4.01	A5 V	24	" #6 1 {0706 0707	good [illegible] guiding
22 02	B	E 0 18	"		"	"	24	" #6 2 {0707 0709	strong
22 [illegible]	C	E 0 45	+64 34		3.64	A0 III	24	" #6 1 {0710 0711	fine.
22 18	A	E 0 40	"		"	"	24	" #6 2 {0712 0714	guiding.
22 25	B	E 0 53	52 02		4.06	F7 V	24	" focus 64½ #6 1.5 {0714 0715.5	[illegible] guiding
22 30	C	E 0 48	"		"	"	24	" #6 (3) {0716 0719	fine
22 41	A	E 0 44	30 31		4.86	K3 III	24	" #6 (2) {0719 0721	fine
22 [illegible]	B	E 0 25	"		"	"	24	" #6 (4) {0721 0725	fine
22 53.5	C		38 28		3.23	A7 III	24	" #6 1 {0725 0726	fine
22 [illegible]	A	E 0 27	"		"	"	24	" #6 2 {0726 0728	[illegible]

257

Dome Temp.
Focus 63⅞
Dome Temp.

Date Wed-Thurs (cont'd) **Observer** Ar - He Mse **Julian Day** ......

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28360	HD 123782	14 04.6	49 56	G 40	IIa O b	13	58° F	23 05	23 : 39	B	0 37
28361	HD 131861	14 50.9	45 43	G 40	IIa O b	13		23 43	00 35	C	[illegible]
28361 T₁	Calibration Sky Wedge				for plates		28344 - 57				
28361 T₂	"	"	"		"	"	28358 - 61				

Dome Temp. 57°F

Focus 63½

Dome Temp.

Transparency Conditions very good - some cloud
0015 CLOUDS

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3 39	B	W 0 3.7	49 37	0	6.8	M2	8-8-8	Std. Vel. focus 63½ #8 (20) {0728 0748}	fine
35	C	00 47W	45 27	0	7.64	F3	8-16	KAFS #9 {0751 0760} (45) ~~#8 [illegible]~~	[illegible]

UNEXP PLATES &
PH A & B loaded in
REFRIGERATOR

Date 13-14 May Thurs Fri **Observer** McL, Mc (HM) **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
~~372 - 1~~	~~HR 4133~~	~~10h 30.8~~	~~+09°29′~~		~~τ~~	~~10~~	~~4:38″~~	~~[illegible]~~	21 42		W 2-22
372 - 1	HR 4133	10 30.8	+09 29		τ	10	4:38″		22 23		W 3 02
-2	HR 4335′	11 07.5′	44 42						22 48		W 2 50
-3	HR "	"	"						22 59		W 3 01
4	HR 4456	11h 32.8	+17° 00′						23 17		W 2 53
5	HR 4534	11h 47.2	+14 47						23 38		W 3 00
6	HR 4335	11 07.5	44 42						23 52		W 3 54
7	HR 4456	11h 32.8	+17° 00′						00 08		W 3 44
8	"	"	"						00 25		W 4 02
9	HR 4534	11h 47.2	+14 47						00 39		W 4h 00
10	"	"	"						00 49		W 4 12
11	HR "	"	"						00 57		W 4 19
12	HR 4335′	11 07.5′	44 42						01 18		W 5 20
13	"	"	"						01 28		W 5 30
14	"	"	"						01 40		W 5 43

Dome Temp. 52°F

Focus

Dome Temp. 46°F

Transparency Conditions EXCELLENT

FULL MOON

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
~~W 2 22~~			3.85	B1 Ib		Integrator #1 Malfunction, Fixed by Frank.	
W 3 02			3.85	B1 Ib			
W 2 50			3.01	K1 III		A4, A5, B5	
W 3 01			"	"		A4, A5, B5	
W 2 53			5.95	B7		B5 B4 B5	
W 3 00			2.14	A3 V		A3 A2 A5	
W 3h 54m			3.01	K1 III			
W 3 44			5.95	B7			
W 4h 02			"				
W 4h 00			2.14	A3 V			
W 4 12			"	"			
W 4 19			"	"			
W 5 20			3.01	K1 III			
W 5 30			"	"			
W 5 43			"	"			

Date 14 May / Thurs **Observer** Mcl. (Mse) **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	~~Ending Time~~ middle E.S.T.	P.I	Hour Angle End
372-15'	HR 4335	11 07.5	+4 42			t=10 sec	4=38"		01 50	"	W5' 52
-16	"	"	"						1 59		6 01
16	HR 6212	16 39.9	+31°40'						2 22		W0 52
17	+2° 3312	17h 24.0	+02°11'						2 41		W0 27
18	HR 6556	17 33.2	+12°35'						03 00		W0 37
19	HR 6603	17 41.6	+04 35'						03 12		W0 40
20	HR 6629	17 46.1	+02 44						03 27		W0 50
21	HR 6869	18 19.4	-02 54						03 40		W0 30
22	γ Lyr HR 7178	18 57.5	32 38						03 53		W0 35
28361T	Sky Test			G10	II·O	9	+54	} Corrector Plate		17	
28361F	~~Focus~~			"	"	"	"	} Removed.		C	

Dome Temp.
Focus
Dome Temp.

Dome Temp. 46°F

Focus ....

Dome Temp. ....

Transparency Conditions ....

Ending Time E.S.T.	P.E.	Hour Angle ~~End~~ centre	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]		W 5 52			3.81	K1 III		A4 05, B5	
[illegible]		6 01			4	"			
2 22		W 0 52			2.32	G0 II		A4, A3, A6	
2 41		W 0 27			7.54	K7 I		C3, C3, C6	
03 00		W 0 37			2.08	A5 [illegible]		A2, A1, A4	
03 1[illegible]		W 0 40			2.77	K2 III		A4, A5, B5	
03 2[illegible]		W 0 50			3.75	A0 V		A4, A5, B3	
03 40		W 0 30			3.26	K0 III–IV		A5, A5, B5	
03 53		W 0 05			3.25	B9 III		A5, A3, A6	

M-M / Out out

Sky 15, Fe arc 2 (no filter)
5/5 no filter Focus 280 as before.

Bad Images

263

Date Fri May 14/15/65 Observer L* Cw Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
28362	H.D. 131861	14 50.9	45 43	G40	B IIAo	13	55	21 44	23 54	A	0 14W
28363	HD 142184	15 4?.0	-23 41	"	"	"	49°	00 20	00 38	B	00 00
28364	HD 161306	17 39.7	-09 46	G40	IIaoB	17	49°	00 48	02 30	C	00 60
28365	HD 164794	17 57.7	-24 22	G40	IIaoB	13		02 43	03 19	A	0 31W
28366	HD 17?235	18 23.2	-25 19	G40	IIaB	13		03 23	04 05	B	0 42W
28366T,	Calibration Step Wedge				for plates		28362-66				

Sat May 16 Cw + V, CC showed Ranger VIII film with group 150 visitors

FRANK

Dome Temp. +50

Focus 62.5

Dome Temp. +49

Transparency Conditions full moon

Some Haze

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
23 [illegible]	A	0 14W	45 26	0	7.64	F3	8-8-8	KHFS Bein Set 8 {765 773	fine
[illegible]	[illegible]	00 00	-23 51	0	5.37	B3IVne	8-8-8	Cn Be (1) Moon [illegible], haze. Focus 62½ 7^4 777 721	fine
[illegible]	[illegible]	00 00	-09 48	0	8.77	B2e[III-IV]	8-8-8	Cn Be (30) 9 782 812	fine
[illegible]	A	00 31W	-24 20	0	6.2	Oe5	8-8-8	(30) 9 815 845	fine
[illegible]	[illegible]	00 42W	-25 15	1	6.71	B3e[II-V]	8-5-8	Cn Be 9^30 846 873	[illegible]

FRANK (1) Had trouble with exp-meter uncapping device – IT DID NOT CAP WHEN THE KNOB WAS TURNED – fortunately realized that the knob felt funny when turning so "capped & uncapped" [illegible] it closed.

Date Mon May 17 **Observer** .... **Julian Day** ....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
28366 F1	Focus test - Put corrector back in + re-aligned ✓			G10	IIaO	9	54°			A
F2	"			"	IIaO	9				C
F3	"			"	IIaO	9				C
F4	"			"	IIaO	9				C
T_2	Tungsten			"	IIaO	9				C
T_3	"			"	IIaO	9				C
T_4	Sky 1 sec. across slit			"	"	"				C

We seem finally to have got rid of the trouble which has been plaguing us re G10, i.e. doubling of the images in the direction ⊥ the dispersion (a hair across the slit gave 2 images in the spectrum; the edges of star + sky spectra showed effects of 2 overlapping spectra). Apparently the corrector plate centre was not exactly on the axis of the spherical mirror — we adjusted it to be so within a few tenths of a mm. and the trouble seems to have disappeared. — Hd

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
				no filter "	5/5	Focus 2.85	C to r
				"	5/5	Focus 2.85	"
				"	5/5	Focus 2.75	"
				"	5/5	Focus 2.00 really al C to r. ⟷	OK
				"	4 counts	[illegible] 6	too weak
				"	25 counts	" broken (5 p.10)	too weak
				" →	25 fr are 15 s sky		GOOD

Double Images Gone!

Date 17-18 Aug '65 Mon-Tues **Observer** Tyse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28367	HD 161306 ~~BD~~	17 39.7	-09 46	G40	IIa Db	17	52°F	00 50 37	02 08	A	E 09
28368	HR 6620 HD 161701	17 41.9	-14 42	G40	IIa Db	13	50°F	02 13 9	02 31	B	W 11
28369	HD 184467	19 29.5	58 24	G40	IIa Db	13	49°F	02 41 30	03 41	C	E 24
28369 F1	focus test	in in/out out		G40	IIa Db	13	48°F			A	
28369 T	Calibration Step Wedge for plates 28367-69 F1										

Dome Temp.

Focus 6:1

Dome Temp.

Dome Temp. 52 °F
Focus 61½ | 60½
Dome Temp.

Transparency Conditions ~~poor at 21 30 [illegible]~~ quite good after midnight

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2 08	1	E0 09	-09 48	0	8.77	B2e	8-8-8	Cn-Be focus 61/2 #9 (30) { 0942 0972	1 wk.
	2	W0 11	-14 43	0	6.05	B9	8-8-8	138 . 39 focus 60½ #7 (3) { 0973 0976	fine
3	C	E0 24	58 29	0-1	7.5	K5	8-8-8	Std. Vel. #9 { 0977	good exposure guiding O.K.
	A						30/30		

Date 18-19 Mar 69 Tues-Wed Observer Sd Hd - Rc (Tyree) Julian Day

Dome Temp.
Focus 69
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
28370	HD 109379	12 29.1	-22 51	G 10	IIa Ob	9		20 41	21 27	B	1 23m
28370 F	Focus test	In-	In/out	out	"	9		-		C	
28371	HD 109379	12 29.1	-22 51	G 10	IIa Ob	9	60°F	21 36	22 27	B	[illegible]
28372	3 Leo	11 44.0	+15 08	G 40	IIa Ob	13	60°F	22 47	22 47½	A	
28373	"	"						22 51	22 51½	B	[illegible]
28374	β Vir	11 45.5	+2 20	G 40	IIa Ob	13		22 58	23 18	C	[illegible]
28375	"	"	"	"	"	13	59°F	23 21	23 35	A	[illegible]
28376	τ Her	16 16.7	46 33	"	"	13		00 06	00 09	B	[illegible]
28377	"	"	"	"	"	"	"	00 12	00 14	A	[illegible]
28378	β Her	16 26.9	+21 42	G 40	IIa Ob	"	57°F	00 32	00 34	A	[illegible]
28379	"	"	"	"	"	"		00 40	00 43	B	[illegible]
28380	ζ Her	16 37.5	31 47	G 40	IIa Ob	"		00 57	00 58	C	[illegible]
28381	"	"	"	"	"	"		01 04	01 08	A	[illegible]
28382	γ Her	17 21.4	17 00	G 40	IIa Ob	"		01 17	01 42	B	[illegible]
28383	"	"	"	"	"	"		01 30	02 20	C	[illegible]
28383 T	Quinn ... [illegible] ... plates 28372 - 83										
~~28384~~	~~α Oph~~	~~17 30.3~~	~~+12 38~~	~~G 40~~	~~"~~	~~"~~				A	

Dome Temp. 65.0°F
Focus 64 / 63 /
Dome Temp.

Transparency Conditions poor at start cloud patches such and [illegible] 1:20 setting [illegible] from south – 22 30

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	E	W 23m	-23 11	0−	2.8	G4	8-8-8	Std Vel * hazy BROKEN PLATE 23 #4 {1023 1046}	fine (in spite weak) c to r exposure
	C						no filter 5-5	Focus 2.0	
22 2[illegible]	E	W 1h 23m	-23 11	0−	2.8	G4	8	FORGOT TO REPLACE FILTER AFTER FOCUS TEST. Comp will be very strong #4 {1047 1065}	weak.
[illegible]	A		+14 49		2.24	A3 I	24	MK-std focus 64 #6(2) {1067 1069}	fine
22 51½	B	W 2 33	"				24	" #6 {1069 1070}	fine
23 8	C	W 2 59	+1 59	0	4.16	F8 V	12-12	" Haze #6 {1070 1074}	fine
23 [illegible]	A	W 3 16	"	"	"	"	12-12	" Clouds #6(2) {1074 1076}	fine
[illegible]	B	0 E0	46 24	"	3.89	B5 IV	24	" #6(2) {1077 1079}	fine
[illegible]	A	E0 36	"	"	"		24	" #6(1) {1079 1080}	fine
[illegible]	[illegible]	E0 26	+21° 32'		3.8	G8 III	24	" focus 63 #6(1.5) {1080 1081½}	fine
[illegible]	B	E0 16	"	4	"	"	24	" #6(3) {1082 1085}	fine
[illegible]	C	E0 09	31 40		3.46	G8 IV	24	" TROUBLE #6(0.5) {1085 1086.5}	fine
[illegible]	[illegible]	E0 03	"	"	"	"	24	" SETTING INS- #6(3) {1087 1090}	fine
[illegible]	[illegible]	E0 09	+16 58	"	6.12	A9 III	24	" Haze + Cloud #6(1) {1091 1092}	fair.
12 [illegible]	C	W0 24	"	"	"	"	24	CLOUDS #6(2) {	guiding
	A			"	2.24	A[illegible]		#6(1) {	

Date .... **Observer** .... **Julian Day** ....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28383 F_1	Focus	In In /	Out Out	G10	IIa-O	9	55°			C
F_2	"	"	"	"	"	"	"			C
F_3	"	"	"	"	"	"	"			C

Dome Temp. 55°F (struck through)

Focus ....

Dome Temp. ....

Transparency Conditions ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		?	no filter		5/5	2.00 focus.	centre to red
			4	4	11	~~[illegible]~~ 1.50	O.K.
			4	4	11	~~[illegible]~~ 1.00	centre to violet

DR HEARD:
I AM NOT SURE NOW WHAT IS BEING USED AS A POINT OF REFERENCE. USING THE BLACKENED BRASS AS AN INDICATOR IT IS NOW AT 0.0 — IN ANY EVENT THIS IS 0.5 <u>GREATER</u> THAN AS MURRAY LEFT IT I.E. THE SAME AS F_2 — NO FOCUS TEST TAKEN

Date 19-20 May /65 Wed - Thurs **Observer** Mcl · Cn (Mc) **Julian Day**

Dome Temp.
Focus 62/
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	~~Ending Time~~ MIDDLE E.S.T.	P.H	Hour Angle ~~End~~ MIDDLE
373-1	HR 4534	11 47.4	+14 46			T=	10 sec	4=38"	20 53		W0 38
373-2	HR 4456	11 32.9	+16 59						21 13		W1 12
-3	HR 4540	11 48.8	+01 58						21 30		W1 15
-4	HR 4695	12 18.6	+03 30						21 45		W1 00
-5	NGC 4649	12 41.9	+11 44						22 06		W0 57
~~-6~~	~~M 3~~	~~13 37.6~~									
-6	HR 4695	12 18.6	+03 30				5 1/2 =		23 00		W2 15
-7	HR 4540	11 48.8	+01 58						23 16		W3 00
-8	HR 4534	11 47.4	+14 46						23 30		W3 16
~~-9~~	~~HR 4456~~	~~11 32.9~~	~~+16 59~~								
-9	HR 4540	11 48.8	+01 58						23 45		W3 30
28384	HD 142184	15 48.0	-23 41	G 40	IIa 0 b	13	53°	00 22	00 40	A	21 W
28385	HD 161306	17 39.7	-09 46	"	"	17		00 48 (49)	02 26	B	16 W
28386	HD 164906	17 55.3	-24 24	"	"	17		02 34 (31)	03 35	C	W1 07

01h Rising moon reveals light cloud in south.

Dome Temp. 62°F
Focus 62/
Dome Temp. 48°F

Transparency Conditions EXCELLENT

THE DOME IS TURNING MUCH BETTER!

~~Ending Time~~ MIDDLE E.S.T.	P.H.	Hour Angle ~~End~~ MIDDLE	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 53		W 0 38				A3V		~~A3V~~, C1/B2, B2/D2, C3/D1, std 58	
1 13		W 1 12				B3V		std 57	
1 30		W 1 15				F8V		std 59	
1 45		W 1 00				K0III		62	
2 06		W 0 57			9.88	G7			
								Serge looked for his W Vir stars in M3	
3 00		W 2 15				K0III		Sky is much darker since third moon disappeared	
3 16		W 3 00				F8V			
3 30		W 3 16				A3V			
3 [illegible]		W 3 30				F8V			
								Serge looking for stars in M 3	
[illegible]	A	00 21 W	-23 50	00	5.37	B3Vne	10-10-10	Cr B Focus 62 #7 1101 1105	fine
2 26	B	00 16 W	-09 47	0-1	8.77	B2e5III-V	10-10-10	Cr B [illegible] #9 1105 1135	fine
3 38	C	W1 07	-24 22	<u>00</u>	7.61	B1IVipe	10-8-8	Cr B 0300 - CONSIDERABLE HAZE IN S - STAR VERY FAINT. #9 1135 1155	late

275

Date 20-21 May '65 Observer McL Julian Day
Thurs-Fri (Mss)

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	~~Ending~~ Time E.S.T.	P	Hour Angle ~~End~~
374-1	β Leo HR 4534	11 47.4	+14 46		t - 10 sec	φ = 38''			20 57		W0 47
-2	β Vir HR 4540	11 48.8	+01 58						21 23		W1 10
-3	HR 4695	12 18.6	+03 30						21 39		W0 57
-4	HR 4983	13 10.3	28 02						21 56		W0 22
-5	HR 4534	11 47.4	+14 46						22 11		W2 00
-6	HR 4540	11 48.8	+01 58						22 27		W2 15
-7	HR 4695	12 18.6	+03 30						22 44		W2 02
-8	HR 4983	13 10.3	28 02						22 59		W1 25
-9	HR 4540	11 48.8	+01 58						23 15		W3 03
-10	HR 4695	12 18.6	+03 30						23 29		W2 48
-11	HR 4540	11 48.8	+01 58						23 42		W3 31
-12	HR 4695	12 18.6	+03 30						0 00		W3 19
-13	"	"	"						0 12		W3 3
-14	HR 4534	11 47.4	+14 46						0 25		W4 15
28387	HD 176318	18 54.6	38 07	G 40	IIa D b	.13	52°	01h 41m	01h 53m	A	E1 27
28388	HD 186547	19 40.0	13 03	G 40	IIa D b	.13		01 58	02 31	B	E0 34

Dome Temp. 6
Focus 6
Dome Temp. 5

Dome Temp. 60°F
Focus 61½ 1
Dome Temp. 51°F

Transparency Conditions VERY GOOD
0045 - THICK HAZE

Ending Time E.S.T.	P.	Hour Angle ~~End~~ MIDDLE	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
20 57		W 0 47				A3 V		#58 FRANK: 1) IT WOULD BE	
21 23		W 1 10				F8 V		#59 BETTER ~~TO~~ HAVE	
21 39		W 0 57				K0 III		#62 BOTH LIGHTS ON	
21 56		W 0 22				G0 V		#65 THE CHART REC.	
22 11		W 2 00				A3 V		#58 THE SAME COLOUR	
22 27		W 2 15				F8 V		#59 2) THE INK DOESN'T	
22 44		W 2 02				K0 III		#62 FLOW TOO WELL	
22 [illegible]		W 1 25				G0 V		#65	
23 [illegible]		W 3 03				F8 V		#59	
23 29		W 2 48				K0 III		#62	
23 42		3 31				F8 V		#59	
0 [illegible]		W 3 19				K0 III		#62	
0 12		W 3 31				〃		〃	
0 25		W 4 15				A3 V		#58	
01 5[illegible]	P	E 1ʰ 27ᵐ	08 13	1	5.7	B8	12-12	B8 - B9 focus 61½ considerable haze #7 (4) {" 59 {" 63	fine
02 31	B	E 0 34	+13 13	1	6.07	B8	8-8-8	B8 - B9 #7 (4) {" 63 {" 67	guiding

Date 21 May 45 **Observer** (Mc)(Mcl) **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle
28389	HD 187691	19 46.2	+10 10	Cn40	IIa Ob	13	52°F	02h 40m 5	02h 50	C	E 1h 22m
28390	HD 190603	20 00.7	31 56	Cn40	IIa Ob	13		02 54 5	03 04	A	E 1 22
28391	"	"	"	"	"	"		03 06 5	03 16	B	E 1h 10m
28391F,	focus test in in/out			Cn40	IIa Ob		49°F			C	
28391T	Calibration Step Wedge			for plates 28389 - 91F,							

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions fair – considerable haze

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	G	E 1ʰ 22ᵐ	10° 19′	0	5.8	F8	8-8-8	std. vel. #7 {1167 1173	fine
03 04	A	E 1 22	32 07	0	5.7	B5Ia	24	M.K std — APPEARS TOO RED FOR B STAR BUT ONLY BRIGHT ONE IN FIELD. #7 (2) {1173 1174	guiding
[illegible]	B	E 1ʰ 10ᵐ	"	0	"	"	8-8-8	" #7 (4) {1175 1179	guiding
	C						30/30		[illegible]

279 Sat., May 22nd, 1965 185 visitors. for first group wanted to show slides, but bulb burnt out; NO spare one around — showed "The Universe"; for second group showed M3. Gd.; Ck.; Sm.

Date 2 May 22-23, 1965 Observer Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.F.
28392	HD 142184	15h 48.0m	-23 41	G40	IIaDb	13		00 01	10 00 21	A
28393	HD 164906	17 58.3	-24 24	"	"	"	55	00 36	56 02 28	B
~~28394~~	~~HD 170235~~	~~18 26.2~~	~~-25 19~~	~~"~~	~~"~~	~~"~~	~~54~~			~~A~~
28393F1	Focus Test	In-In / Out-Out					55°			A

Hour Angle End: 0 15W; 0 11W

ranted
NO yam
Sd; Ch; Um.

Dome Temp. 55°

Focus ....

Dome Temp. ....

Transparency Conditions ~~Fa~~ Excellent!
01:30 Cirrus in South.

H.V. found to be 700V. after exp gave 20 min

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 21	A	0 15 W	-23° 52′	0″	5.4	Blue	8-16	CuBe Very slow! T = 55°F Focus: 62.5 Sens } { ~~[illegible]~~ 1 min on 700V.	out of focus strong
02 23	B	0 11 W	-24° 22′	0″	7.61	BIII pe	8-8-8	CuBe SIDEREAL DRIVE OFF SO HAD TROUBLE FINDING STAR. CHECKED WITH FINDER FIELD. Sens 8 {1186 1194	out of focus
~~[illegible]~~	~~A~~				~~6.71~~	~~B5e (II)~~		~~CuBe~~ ~~Sens? {~~	

Clouded Out. 02 30

Capping mech became disconnected so had to cap with door open (cut all lights out)

| | A | | | | | | 30/30 | | arise to red. badly |

281

Date 23-24 May '65 Observer Sd - (Msc) Julian Day
Sun - Mon

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28394	BD + 29° 2495	14 02.6	+29 45	G40	IIa Ob	17	62	20 50 (78)	23 25	A	01 10 W
28395	HD 131 861	14 50.9	45 43	G40	IIa Ob	13	55	23 40 (32)	0 44	B	W1 41
28396	HD 145001	16 03.6	+17 19	G40	IIa Ob	13	54°F	0 50 (45)	2 20	C	W2 03
~~28397~~	~~HD 151 306~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~IIa O~~						
28397	[illegible]	[illegible]	[illegible]	[illegible]	IIa Ob	13				A	
28398				"	"	"	"			B	

Dome Temp.
Focus 64
Dome Temp.

Dome Temp. 62°F
Focus 64½ / 62 /
Dome Temp.

Transparency Conditions excellent
0120 - TEMP. DROPPING, NOTICEABLE(?)
MUCH CLOUDS

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3 21	A	01 10 W	29 26	0	10.00	F8	8-8 —	KAFS binary (focus set 64½) TROUBLE CAPPING EXP. MTR. #9 (30) {1205 / 1235	l weak
0 64	B	W1 41	45 27	1	7.64	F3	8-8 8	" focus set 62 / SEEMS [illegible] TO [illegible] VERY SUDDENLY AT MID EXP. #8 (11) {1239 / 1250	guiding
2 20	C	W2 03	17 08	0 =	6.1	G4	8-8	Std Del #7 (6) {1250 / 1256	fine

SOLID OVERCAST

FRANK: 1) EVIDENTLY THERE IS AN EXPOSED WIRE ON THE LIGHT OVER THE EXP. MTR — I GOT QUITE A SHOCK
2) THE RADAR-LITE HAS BECOME INOPERATIVE IN THE PAST 3 DAYS (OJER)

Date .... Observer .... Julian Day ....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions ....

Ending Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
								(3) WE HAD THE SAME TROUBLE AS GERRY DID A WEEK AGO IN RECAPPING THE EXP. MTR. —NECESSARY TO CLOSE THE SHUTTER BY HAND (IN THE DARK & H.J. OFF)	

Date 24-25 May 1952 Mon.-Tu. **Observer** SK - Hr (Muse) **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
28397	HD 123782	14h 4.6m	-49° 56′	G 40	IIa O3	13	59	21h 36m 26	22 29	A	W0 13
28398	HD 142184	15 48.0	-23 41	G40	IIaOb	17	57°F	22 39 10	22 59	B	E1 9
28399	HD 161306	17 39.7	-09 46	G40	IIa O15	17	56°F	23 11 43	01 17	C	00 35 E
28400	HD 164906	17 58.3	-24 24	G40	IIa Ob	17	56°F	01 35 49	03 13	A	W1 03
28400 T	Calibration Step Wedge for plates 28392 - 28400										

Dome Temp.
Focus
Dome Temp.

Dome Temp. 61°F

Focus 64/63

Dome Temp.

Transparency Conditions clouds · poor
20:00 - good (for spectrosc.)
02:00 "

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible] 29	[illegible]	W 0 15	49 37	0	6.8	M2	8-8-8	St d Vel. focus 64 #8 (20) {1263 1283	fine.
[illegible]	[illegible]	E 1 00	-23 52	0	5.37	33 Ince	8.8-8	Cu · Be focus 63 #8 (10) {1285 1295	guiding
[illegible] 7	C	00 33 E	9 47	0	8.77	82 [illegible]	8-8-8	" #9 (30) {1296 1326	& weak.
[illegible] 13	A	W 1 03	-24 21	0-1	7.61	B1 pe	8-8-8	" SPECTROGRAPH NEAR N. PIER #9 ~~(30)~~ {1326 1342	weak.

Mf

Date 25-26 May/65 Tues-Wed **Observer** Hb - Hk (M; ol) **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
~~28 45~~	~~γ Vir~~	~~12 36~~	~~-00 54~~	~~640~~	~~IIaOb~~	~~13~~	~~68°F~~	~~23 09~~	~~(23 13)~~	B	
28400F	Focus Test			640	IIaOb	13	68°F	in-in/out-out		A	
	Thurs May 27/65					Hd	Yp.				
28400 F2	Focus Test. In-in/out-out			G10	IIaO	9	66F			C	Fre
28400 T1	Sky 8 sec.			G10	IIaO	9xL				C	
T2	" 15 "									C	
T3	" 30 "							—	—	C	
T4	Calibration		for plates 28400 F2 - T3								

Dome Temp.
Focus 6.7
Dome Temp.

Dome Temp. 71° F

Focus 67½1

Dome Temp.

Transparency Conditions

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	-01 14		3.65	F0V	8 –	½ X NDR [illegible] MK STD. zero # 16 13661 1362½	
					30/20		OK
Focus test –					no filter 5/5.		badly fogged O.K.
					none		

Date 27-28 May/65 Thurs - Fri **Observer** Vdb - Mse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Middle ~~Ending~~ Time E.S.T.	P.H
375-1	HR 4983	13 10.3	+28 02		t = 20 ~~sec~~ sec					
Cn, Hb	<u>Fri May 28</u>	Replaced field flattener with original - which								
28400 F3	Focus test In-In / Out-Out			C40	IIaoB	13	52°F			B
F4	"	"		"	"	"	"			B
F5	"	"		"	"	"	"			B
F6	"	"		"	"	"	+52°F			B
F7	"	"		"	"	"	"			B
F8	"	"		"	"	"	"			B
F9	"	"		"	"	"	"			B
T5	Iron arc - full aperture			"	"	"	"			A

Dome Temp. 63 °F
Focus
Dome Temp.

Transparency Conditions WINDY

Hour Angle ~~End~~ MIDDLE	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			4.3	290 II	~~8~~	CLOUDS	
covers a larger part of spectrum							
Focus 167					40/40		c to vi
Focus 120					40/40		c to vi
Focus ~~0~~20					40/40		c to r
Focus 060					40/40		c to r in vi
Focus (0)65					40/40	TURNED S SCREW IN 1/3 rev; N " OUT 1/3 rev; changed focus to 65	c to r
Focus 72			used Fe arc	610 filter	12/12		c to vi
Focus 69.5			"		10/10		OK
" "					5		OK

291 Sat. May 29, 1965 — Visitors — show Ranger VII film to first group, M3 to second group. Hb, Dm, V

Date 29/30 May 1965 **Observer** Hb Dm ✓ **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle End
28401F	Focus	Test		G40	IIa Ob	13	46°F	in in / 73	out out	A	
28401 +24	HD 164906	17 58.3	-24 24	G40	IIa Ob	17	46°F	00:00	02 26	B	0036W
28401T₁	Calibration Step Wedge				for plate 28401						
	May 31										
28401 T_2	Full aperture			G40	IIa Ob					A	
28401 T_3	Test	Calibration	Wedge			Voltage	80	volts	Time 1 min		
T_4	"	"	"			"	40	volts	" 5.6 min		
T_5	"	"	"			"	30	volts	" 9.3 min		
376-3222	α CrB	15h 33.1	+26°50'	?		28"		22h10			W

Dome Temp.
Focus
Dome Temp.

Dome Temp. 46°

Focus 67½

Dome Temp.

Transparency Conditions good, not photometric
a lot of haze over the western
horizon & south.
clouds passing by, (1:15),

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	G10 filter				12/12		
0036W	-24 22	0	7.6,	B1 IV pe	2-4-2	GnBc sens #7 13 8 7 / 1392	fine
		Centre			3 sec	G10 filter	
		Outside			20 sec	G40 filter	
30ᵐ W						not photometric, sky totally clouded over	

Date 31 May – 1 June **Observer** Udb, McL, Mre SM & Hlbr **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
	~~γ U Maj~~	~~11 51.7~~	~~53 55~~							
28402	σ Boo ~~[illegible]~~	14 30.3	+30 11	G40	II aOb	13	53°F	22 55	23 01	B
28403	"	"	"	"	"	"	"	23 04	23 08	C
28404	BD 13 1861	14 50.9	45 43	G40	II aOb	13	53°F	23 17	23 45	B
28404F1	focus test						52°F			C
28404T	Calibration Slip Wedge				for plates		28402 – 04			
28404 F2	focus test	[illegible] / [illegible]		[illegible]	II aOb	13	48°			
F3	" "	"	"	"	"	13	47°	Taken with narrow slots in collimated beam		
F4	" June 1–2 Hd	"	"	"	"	"	"			
28404 F5	focus	[illegible] / [illegible]		"	"	13	46	"		A
F6	"		"			"	47	"		A
F7	"		"			"	"			A
F8	"	"	"	(11/16) wider plate	IIa O	"	49°			A
F9	"	"	"			"	50			A

Dome Temp. 56°F

Focus 70/

Dome Temp.

Transparency Conditions

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	B	W 0 48	29 55 50		4.45	F2 II	24	MK-std focus 70 #6 (3) {1422 / 1425}	[illegible]
[illegible]	B	W 0 54	"	"	"	"	"	" #6 (1.5) {1423 / 1426.5}	[illegible]
[illegible]	B	W 1 12			7.64	F3	8	KAES BIN. CLOUDS #9 (45) {1427 / ~~[illegible]~~ / 1440}	[illegible] OK [illegible] c to r in r
	C						1 30/30		
			Focus 68				30/30	MOVED N SCREW IN 1/6 REV	sl. c to r all across plate, more so in r.
		2 slits 1/4 x 4"							
		3" apart over grating			Focus 70		3/3	no filter Moved N screw in 1/12 REV	c to r in vi ! OK in red
		"	"	"	Focus 70		3/3	" " Moved S screw in 1/12 REV	sl c to vi at ends [illegible]
							no filter 3/3	Same	same as above
		added	3/1000 shim stock at ends of plate				3/3	But [illegible]	[illegible]
		"	"	"	"	"	3/3	(- Probably plate was too narrow & wasn't held by field flattener) OK at extreme [illegible] - c to vi in middle by 50μ.	
		"	"	"	"	"	3/3	c to vi center [illegible] c to red at [illegible] end	
							3/3	Put shims on field flattener frame instead of on plate	centre to [illegible]

74" mirror washed

[illegible]

Date 2-3 June '55 Wed.-Thurs. **Observer** H.L. Aller, Dr. McD **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28405	ε Vir	12h 59.7m	+11° 13.7'	G10	IIa O b	9 XL	56°F	21 19 (28)	22 14	C	[illegible]
28494 F10	focus test	in and	out	G140	IIa O	13	56°F				
	ζ U Maj	11 57.7	53 55						MIDDLE		
376-1	HR 5511	14 44.5	+2 02			t=10 sec		a=33'	0 01		W1 44
-2	HR 5854	15 42.6	+06 32						0 23		W1 07
3	HR 5511								END 0 54		W2 39
-4	HR 5854								1 06		W1 52
-5	HR 5511						51°		1 17		W3 [illegible]
-6	HR 5854						51°		1 29		W2 15
7	HR 5511								1 41		W3 25
8	HR 5511						49°		1 50		W3 34
9	NGC 6574	18 10.2	+14 58			t=60 sec			2 27		W0 41
10	HR 5854					t=10 sec			2 40		W3 27
11	"					"			2 50		W3 36
12	"					"			3 03		W3 4[illegible]

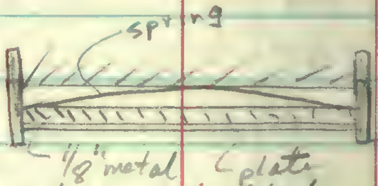
Dome Temp. 58
Focus
Dome Temp.

Transparency Conditions clouds & haze at first. very good [illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						PLATE BROKE DURING EXP.	
W 1 42	+11° 10′	1	3.8	G9 III	5-5-5	Equiv. width 2 ... #4 (40) 1468 / 1502	sl. out of focus near ... and ... broken
					3/3 ← no filter	focus changed from 72.2 to 72	
			?	I	spectroshot testing filter (Hβ)		
MIDDLE W 1 44			3.76	A0 V			
W 1 08			2.75	K2 III p			
END W 2 38							
W 1 52							
W 3 06							
W 2 15							
W 3 25							
W 3 34							
W 0 41			12.8				
W 3 27			2.75				
W 3 36			"				
W 3 49			"				

297

Date 3 June/65 **Observer** [illegible] **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time ~~E.S.T.~~ MIDDLE	P.H
376-13	HR 6714	17 58.9	+02 56		t=10 sec		48°F		3 18	
-14	~~HR 6603~~	~~17 41.7~~	~~+04 35~~	sky	"			"	3 24	
-15	HR 6603	17 41.7	+04 35		"				3 35	
Cu	June 3, 1965				11/16" x 2½"					
28405 F1	Focus Test	Focus	69	640	IIaO	13	46°F			A
F2	Focus Test	Focus	67	"	"	"	"	to hold plate flat		"
F3	" "	Focus	63				49°	"	"	A
F4	" "	Focus	62	"	"	"	"	"	"	A
F5	" "	Focus	62	"	IIaOb	13	52°	ordinary	plateholder	B

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions ....

Hour Angle ~~End~~ MIDDLE	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W1 48			3.92	BS I 6			
W1 54							
W2 22			2.94	K2 III			
2 slots over grating	no filter			3/3 →			c to vi all the way across [illegible] c & vi
	"				3/3		
	"				3/3		c to vi [illegible]
	"				3/3		OK
	"				3/3		OK

Date 3-4 June/65 Thurs - Fri **Observer** Vdb - Mse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	~~Ending~~ CENTRE Time E.S.T.	P.H.	Hour Angle ~~End~~ CENTRE
	γU Maj.	11 51.7	53 55								
377-1	HR5270	14 00.8	+09 52			t=10 sec	58°F		21 56		W0 28
									22 04		W0 36
-2	HR5511	14 44.5	+02 02			"	56°F		22 22		W0 09
-3	HR 5511 ~~5270~~	14 44.5	+02 02						22 31		W0 19
-4	HR5270	14 00.8	+09 52			"	55.0°F		22 44		W1 16
-5	HR5270	"	"			"			22 54		W1 25
-6	HR5511	14 44.5	+02 02			"			23 06		W0 54
-7	"	"	"						23 14		W1 01
-8	HR5270	14 00.8	+09 52			"	53°F		23 26		W1 58
-9	"	"	"			"			23 35		W2 06
-10	HR5511	14 44.5	+02 02						23 46		W1 34
-11	"	"	"			"			23 55		W1 43
-12	HR5270	14 00.8	+09 52			"	53°F		0 07		W2 38
-13	"	"				"			0 15		W2 4[illegible]

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions very good

~~Ending~~ CENTRE Time E.S.T.	P.H.	Hour Angle ~~End~~ CENTRE	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
								testing filters in spectrograph.	
21 56		W 0 28			6.12	G0 III		C6, C2, C4, C5, C5, C6	
						REPEAT		~~C5,~~	
2 04		W 0 36						C6, C2, C4, C5, C5, C6	
22 22		W 0 09			3.76	A0 V		B6, B2, B3, B3, B3, B3	
22 31		W 0 19			"	"		B6, B2, B3, B3, B3, B3	
2 44		W 1 16			6.12	G0 III		C6, C2, C4, C5, C5, C6	
22 58		W 1 25			"	"		C6 C2 C4 C5 C5 C6 ← bottom S	
3 06		W 0 54			3.76	A0 V		B6 B2 B3 B3 B3 B3	
3 14		W 1 01			"	"		"	
23 26		W 1 58			6.12	G0 III		C6 C2 C4 C5 C5 C5	
23 35		W 2 06			"	"		"	
23 46		W 1 34			3.76	A0 V		B6 B2 B3 B3 B3 B3	
23 55		W 1 43				"		"	
0 07		W 2 38			6.12	G0 I		C6 C2 C4 C5 C5 C5	
0 15		W 2 47				"		"	

Date FRI / 4 **Observer** [illegible] **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	~~Ending~~ Centre Time E.S.T.	P.H	Hour Angle centre
377-14	HR5511	14 44.5	+40 02			t=105 sec	52°F		0 26		W2 14
-15	"		"			"			0 33		W2 22
-16	HR5270	14 00.8	+09 52			"	52°F		0 44		W3 16
-17	"	"				"			0 54		W3 26
-18	HR5511	14 44.5	+40 02			"			1 05		W2 53
-19	"	"				"			1 12		W3 01
-20	HR5270	14 00.8	+09 52			"			1 22		W3 54
-21	"	"				"			1 29		W4 02
-22	HR5511	14 44.5	+40 02			"			1 39		W3 28
-23	"	"				"			1 47		W3 35
-24	M13 NGC6205	16 39.9	36 33	3		t=20 sec	51°F		2 20		W 2 ,2
-25	sky								2 29		W 22
-26	M56 NGC6779	19 14.6	+30 05			"	"		2 43		0
-27	sky					"	"		2 53		W 11
-28	HR7178	18 57.6	32 38			10 sec	50°F		3 05		W0 40
-29	HR7069	18 45.5	+18 08			"	"		3 18		W1 05

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions EXCELLENT

Time E.S.T.	P.H.	Hour Angle ~~East~~ centre	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
26		W2 14			3.76	A0V		B6 B2 B3 B3 B3 B3	
33		W2 22			4			"	
44		W3 16			6.12	G0III		C6 C2 C4 C5 C5 C5	
54		W3 26			4			"	
05		W2 53			3.76	A0V		B6 B2 B3 B3 B3 B3	
12		W3 08			4			"	
22		W3 54			6.12	G0III		C6 C2 C4 C5 C5 C5	
29		W4 02			4			"	
39		W3 28			3.76	A0V		B6 B2 B3 B3 B3 B3	
47		W3 35			4			" ← ICE ADDED TO COLD BOXES	
20		W 2 12			6.8			D6 D3 D4 D5 D5 D6	
29		W 2 23						"	
43		0			9.6			D6 D6 D6 D6 D6 D6	
53		W 11						"	
05		W 0 40			3.30	B9III		~~A2~~ B5 B2 B3 B3 B3 B3	
1		W1 05			4.37	A3V		C3 B4 B4 B5 B5 B5	

Date June 4/5, 1965 Fri/Sat **Observer** Sk, Hb, Db **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
378-3223	α CrB	15ʰ 33.1	+26° 50	5/4/0		20″		9ʰ 13ᵐ		
-3224	ξ Leo	10ʰ 11.1	+23 55	5/4/2 5/5/2				9ʰ 55		
-3225	ε Vir	12 57.2	+11 30	5/5/2				10ʰ 16ᵐ		
-3226	α Ser	15 39.3	-6 44	5/5/2				10ʰ 52		
-3227	β Dra	17 28.2	+52 23	5/5/2				11ʰ 22ᵐ		
-3228	161796	17 42.5	+50 05	6/6/2				11ʰ 53ᵐ		
-3229	ξ Dra	17 51.8	+56 52	5/6/2				0ʰ 28ᵐ		
-3230	ν Her	17 54.7	+30 12	5/6/2				0ʰ 57ᵐ		
-3231	89 Her	17 51.4	+26 4	6/5/2+3				01ʰ 22ᵐ		
-3232	162714	17 47.3	-6 7	6/6/3				1ʰ 49ᵐ		
-3233	170764	18 26	-19 12	7/5/3				02 29		
-3234	176155	18 53.8	+17 14	6/5/3				03 10		
-3235	γ Aql	19 41.4	+10 22	5/5/2				03ʰ 40		

Dome Temp. 62° F
Focus
Dome Temp.

Transparency Conditions ~~good~~ - excellent

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		1h 27m E		good to v. good	2.23	A0 V		} first test of equipm by means of spectro [illegible] (Bob McClure) — * too far west, telescope slips; rests of altocumulus in recordings visible (not at the sky)	
		4h 28m end			3.65	F0 II-III			
		2h 6m W			3.0	G9 III			
		0h 5m W			2.8	K2 IV			
		1h 21m E		v. good	2.8	G2 Ib		Sky improved	
		1h 3m E			7.0	F2 Ia		+ Sky	
		0h 36m E			3.9	K2 III			–
		0h 13m E			4.4	F2 II			
		0h 12m W			5.4	F2 Ia			
		0h 49m W			6.5	G3 Ib ✓		+ Sky record	
		0h 46m W			7.0	G0 Ib ✓		+ Sky : seeing only good, diffraction pattern visible	
		0h 58m W			5.5	cF5			
		0h 40m W			2.7	K3 II			

Motor pretty hot, smells a bit
ink is going to be exhausted

1522 } { 21^m 30^sec 6 min 30 23^h 28^m
1523 } { 28 22 00 19m

190 Visitors showed Universe, M3 Cn, V, CC

305

Date Sat Sun 5-6 June 1965 **Observer** Cn Sd — (Dm) **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28406	HD 164906	17 58.3	-2424	C40	IIa O	17	64°	23.09	~~00 05~~ (00 43)	B
28406 F1	Focus Test		In In (Hand-held)		"	13	60°			C
28406 T7 (G10)	Calibration Step Wedge			for	plate 28406					

Dome Temp.
Focus 67
Dome Temp.
Hour Angle End

Dome Temp. ....

Focus 67/

Dome Temp. ....

0^h cloud covering 1/3 sky.

0 05 clouds

Transparency Conditions Haze & occasional cloud from NW

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
.. 05	B	01 18 E / 00 40 E	$-24°22'$	0	7.61	B1 IVpe	8-16	Cn. Be 0^h 1 cloud Setting 9 { 15 20 / 15 27.7	weak
	C						31/30	Focus 67	center to red.

Closed up 01^h

Date 8-9 June /65 Tues-Wed **Observer** Hd- Mf Nese **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P	Hour Angle End	D
28407	ε Vir	12 59.7	+11 13.7	G10	II a O	9×2	72°F	20 41 (28)	21 37	B	1h12	+1[illegible]
28407 F1	focus test			G10	"	9				C		
F2	"			G40		13	69°F			A		
28408	HD131861	14 50.9	-45 43	"	II a O	13	69°F	22 09 (57)	23 50	B	1h5[illegible]	4[illegible]
28408 T	Calibration step wedge for plate #28408											

Dome Temp. 71° F

Transparency Conditions fair

2230 - clouds coming lightning in W

Focus ....

Dome Temp. ....

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
21 57	3	W 1 29	+11 11	(	3.0	G9 III	8-8-8	[illegible] clouds. #4 { (30) 1575 1605	weak
	2						no filter 5/5	Focus ?.05	focus val. ctm!
	1						3/3	focus 68½ Developed.	focus ok.
[illegible]	2	W 50^m	45 27		7.64	F3	8.	KAFS CLOUDS #8 9 { (20) 1609 1612 [illegible] clouds	weak

Date June 9/10 1965 (Wed - Thurs) **Observer** Misc Dm **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.F
28408 F.	~~focus test~~			G40	IIa O	13	68°F			A
28409	ξ Boo A	14 46.8	+19 31	"	"	"		22 39 (8)	22 54	B
28410	"	"	"	"	"	"	"	22 56 (2)	23 00	C
28411	45 Boo	15 02.9	+25 16	"	"	"	"	23 05 (5)	23 15	A
28412	"	"	"	"	"	"	"	23 17 (4)	23 24	B
28413	g Her	16 17.5	+19 23	"	"	"	67°F	23h 32 (2)	23 35	C
28414	"	"	"	"	"	"	"	23h 36	23 37 10	A
28415	ζ Oph	16 31.7	-10°22	"	"	"	"	23 45	23 46.	B
28416	"	"	"	"	"	"	"	23 48	23 49±	C
28417	HD161701 (HR 6620)	17 41.9	-14 42	"	"	"	"	23 59 (15)	00 29	A
28418	HD171391	18 29.5	-11 03	"	"	"		00 35 (10)	00 54	B
28419	HD165814(A) (HR 6773)	18 02.7	-25 29	"	"	"	64°F	01 06 (22)	01 49	A
28418 F,	focus test in in/out out			"	"	"	64°F	——	——	C
28420	HD 184467	19 29.5	58 24	"	"	"	63°F	01 58 (26)	02 50	B
28421	σ Dra	19 32.6	69 29	"	"	"	62°F	02 56 (4)	3 03	A
28422 (28422 F)	"	" (28408 F)	" (-19)	"	"	"	"	3 05 (2)	3 09	C

Dome Temp.
Focus 68½
Dome Temp.
Hour Angle End

Dome Temp. 70°
Focus 68½ / 67
Dome Temp. 58°F

Transparency Conditions clouds & haze: poor

non photometric clouds drifting by, all time
moon >1/4,
EXCELLENT ~~good~~ for spectra after 01 00

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
					3/3	— no filter; focus set 68½	sl. centre to red.
W 0 59	+19 15	0	5.30	G8V	24	MK stds — #6 [3] {1617, 1620	fine
W 1 06	"	"	"	"	"	" — #6 [1.5] {1621, 1622.5	fine
W 1 05	+25 00	"	4.92	F5V	"	" — 1/4 ½" [illegible] — #6 [3] {1623, 1626	comp weak, guiding
W 1 13	"	.	"	"	"	" — #6 [1.5] {1627, 1628.5	guiding
W 10m	19°14'	"	4.1	A9III	24	" — #6 [1] {1629, 1630	fine
W 13m	"	"	"	"	24	" — TELESCOPE STICKING IN δ — #6 [1/2] {1631, 1631.5	[illegible]
W 0 07m	-10°28'	"	2.60	O9.5V	24	" — 6 (1) {1631, 1632	fine
W 05	"				24	" — OK — 6 (1/2) 16	fine
E 0 21	-14 43	0	6.05	B9	8-8-8	B8-B9 — PLATE MAY BE FOGGED; REPAIRED CAPPING DEVICE — #6 (2) {1633, 1635	guiding
E 0 43	-10 58	0.0	5.2	gG7	8-8-8	Std Vel — #6 (3) {1636, 1639	fine, comp weak
W 0 39	-25 28	0	6.7	B8	8.8.8	B8-B9 — focus set 67 — #8 (10) {1640, 1650	fine
—	—	—	—		3/3	— no filter	[illegible]
W 0 15	58 31	0	7.5	K5	8-8-8	Std Vel — #9 {1652, 1700	fine
W 0 26	69 36	0	5.47	K0V	24	MK std — COMPARISONS ARE WEAK — #7 (4) {1702, 1706	fine
W 0 32	"	"	"	"	24	" — #7 (2) {1706, 1708	[illegible]

Date 10-11 June /65 Thurs - Fri **Observer** Mac - Mcl **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	~~Ending~~ MIDDLE Time E.S.T.	P.F.
	γ UMa								~~22 31~~	
379-1	HR 5511	14 44.5	+02 02		t=20 sec				22 31	
-2	"	"	"		"				41	
-3	HR 5854	15 42.6	+06 32		"				23 06	
-4	"	"	"		"				23 15	
-5	HR 5933	15 54.8	+15 47		"				23 31	
-6	HR 5511		"						23 44	
-7	"								23 53	
-8	HR 5947	15 56.1	+26 59		"				0 07	
28423	HD 176318	18 54.6	38 07	G40	IIa D6	13	54°F	0 55	1 05	A
28424	HD 171780	18 31.6	34 22	"	"	"	"	1 13	1 23	B
28425	HD 174237	18 44.5	52 53	"	"	"	"	1 28	1 41	C
28426	HD 184467	19 29.5	58 24	"	"	"	53°F	1 46	2 44	A
28427	η Cep	20 43.3	61 27	"	"	"	50°F	?	2 55	B
28428	"	"	"	"	"	"	"	2 57	03 00	C

~ 3/4 full moon

Dome Temp. 62°F

Focus

Dome Temp. 48°F

Transparency Conditions VERY GOOD (PHOTOM)

2300 - some clouds - S & SW

0030 - not photometric

Hour Angle ~~End~~ MIDDLE	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
~~W0 46~~							
W0 46			3.76	A0V		B6, B2, B3, B3, B3, B3	
0 56			"	"		"	
W0 23			2.75	K2III p		B4, A5, B2, B4 B4, B6	
W0 32			"	"		"	
W0 36			3.86	F6V		B6, B2, B3, B3, B4, B6	
W1 59						B6 B2 B3 B3 B3 B3	
W2 08						"	
W1 10			4.22	K3III		B6 B3 B5 B6 C2 C4 Clouds	
E0 52	38 12	0	5.7	138	8-8-8	138-139 focus 63 #7 [3] {1713, 1716}	fine
E0 11	34 25	0	5.98	B3:e [III-V]	8-8-8	Cr-Be some clouds #7 [3] {1717, 1720}	fine
E0 6	52 57	0	5.81	B3e [III-V]	8-8-8	Cr-Be #7 [3] {1722, 1726}	fine
W0 11	58 31	0	7.5	K5	8-8-8	Std Vel #9 [53] {1727, 1780}	fine
E0 50	61 42	0	4.35	K0IV	24	Mk Std focus 62 #6 [2] {1781, 1783}	fine
E0 45	"	"	"	"	24	" #6 [1] {1783, 1784}	fine

Date Fri 11 June /65 **Observer** [illegible] **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle End
28429	HD 186547	19 40.0	+13 03	G40	IIaOb	13	50°F	3 07 [9]	3 25	A	42
28429T	Calibration Step Wedge			for plates 28423-29							

Dome Temp.

Focus

Dome Temp.

Dome Temp. 48 °F

Transparency Conditions some clouds

Focus ....

Dome Temp. ....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3 25	A	⅜ 42	+13 13	0⁻	6.07	B8	8-8-8	B8-B9 #7 3 {1785 1788}	fine

Date 11-12 June, 1965 Fri-Sat **Observer** Hb, Sd **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
~~28430~~	~~δ Sco~~	~~15 54.4~~	~~-22 20~~	~~G40~~	~~IIaO~~	~~13~~	~~64°F~~	~~21 45~~	~~21 47~~	A	01 03E
28431	δ Sco	"	"	"	"	"	"	21 50	21 52	B	01 03E
28432	δ Sco	"	"	"	"	"	"	21 56	21 58	C	0 57E
28433	ω¹ Sco	16 01.0	-20 24	G40	IIaO (unbaked)	13	64°F	22 06	(2) 22 10	A	0 51E
28434	ω¹ Sco	"	"	"	"	"	"	22 12	(2) 22 16	F	00 46E
28435	σ Sco	16 15.1	-25 21	G40	IIaO	13	64°F	22 32	(2) 22 35	A	[illegible] 5E
28436	σ Sco	"	"	"	IIaO	13	64°F	22 37	(1) 22 39	B	00 36E
28437	HD 161701 (HR 6620)	17 41.9	-14 42	G40	IIaO	13	64°F	22 52	(17) 23 26	C	01 16E
28438	HD 165814 (HR 6773)	18 02.7	-25 29	G40	IIaO	13	62°F	23 35	(37) 00 48	A	00 14E
28439	HD 170235	18 23.2	-25 19	G40	IIaO	13	61°F	00 55	(32) 01 59	B	00 36W
28440	HD 171780	18 31.6	+34 22	G40	IIaO	13	58 F	02 10	(14) 02 37	C	01 07W
28441	HD 176318 (HR 7174)	18 54.6	+39 07	G40	IIaO	13	57°F	02 43	(8) 02 59	A	01 06W
28442	δ Cyg	19 41.8	+44 53	G40	IIaO	13	56°F	03 05	(1) 03 07	B	00 27W
28443	δ Cyg	19 41.8	+44 53	G40	IIaO	13	56°F	03 09	03 10	C	00 30W
28443T	Calibration Step Wedge for plates # 28430-43										

Dome Temp. 66°F from 28440
Focus 67/64/
Dome Temp. 56°F

Transparency Conditions good — scattered CI, As
gibbous moon
2315 — CI from south

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	A	01 08E	−22 29	0-1	2.3	B0V	[illegible]	MK Std ~½X field flattener not done ① 4 1791 1792	fine
[illegible] 52	B	01 03E	−22 29	"	"	"	18 18	" ½X 4 1792 1793	fine
21 31	C	0 57 E	−22 29	0-1	"	"	18 18	" ¼X 4½	broken
22 1	A	0 51 E	−20 34	0-1	3.91	B1 V	12-12-12	" ½X 4 ① 1794 1795	guiding bad
22 0	[illegible]	00 46E	"	0	"	"	12-12-12	" ¼V CAPPING DEVICE GIVING TROUBLE ½ 1795	bad
22 35	A	00 39E	−25 26	0	2.9	B1 III	12-12-12	" ½X # 4 ① 1796 1797	fine
22 39	B	00 36E	"	0	2.9	B1 III	18-18	" ¼X # c ½ 1797	guiding
23 26	C	01 16E	−14° 41′	0-1	6.1	B9	12-12-12	B8-B9 Binary — End of δ slow motion reset # 6 ③ 1798 1801	fine
00 48	A	00 14E	−25 27	0	6.7	B8	12-12-12	B8-B9 Binary VISUAL DOUBLE # 7 ⑤ 1802 1807	guiding
01 59	B	00 36W	−25° 15′	0-0	6.7	B1.5e III	12-12-12	Cn-Be Prog FINDER FIELD DRAWN # 7 ⑥ 1809 1815	fine
[illegible] 27	C	01 07W	+34 26	0⁻	5.98	Be III	12-12-12	Cn-Be Prog # 6 ③ 1817 1820	fine
02 59	A	01 06W	+38° 13′	0⁻	5.7	B8	12-12-	B8-B9 Binary FINDER FIELD DRAWN 6 ③ 1820 1823	fine
03 07	B	00 27W	+45° 04′	0⁻	2.82	B9.5 III	18-18	MK STD ~½X #4 ① 1824 1825	[illegible] guiding
03 [illegible]	C	00 30W	+45° 04′	0⁻	2.82	B9.5 III	18-18	MK STD ~¼X #4 ½ 1825.3 1825.8	guiding

317 180 visitors; showed ξ Her ABCD Rc, Ch, Sm.

Date Sat, June 12-13, 1965 **Observer** SK **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
380-3236	α CrB	15h 33.1	+26°50	5/4/2		28"		11h16		
380-3237	α Ser	15 42.6	+6°31	5/5/2		28"		0h1		
380-3238	162714	17 50.8	-6 8	6/6/3		28"		0h37		
380-3239	170764	18 29.8	-19 9	7/5/3		28"		1h12		
380-3240	*1 in IC4725	18 30.0	-19 9	7/5/3		28"		1h46		
380-3241	178555	19 7.7	-19 50	7/4/3		28"		2h7		
380-3242	π Sgr	19 7.7	-21 05	5/5/2		28"		2h45		
380-3243	η Aql	19 50.7	+0 55	5/6/3+2		28"		3h10		
380-3244	γ Cyg	20 20.9	+40 8	5/5/2		28"		3h38		

Dome Temp. 52°F

Focus

Dome Temp.

Transparency Conditions transparency good, rests of clouds on photometer tracings recognizable

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
$1^h 8^m$ W		v. poor	2.23	A0 V		Visitors finish $11^h 10$; Moon	
$1^h 36^m$ W			2.8	K2 III		night photometrically doubtful	
$0^h 1^m$ E		poor	7.0	G0 Ib	+ Sky	improving	
$0^h 1^m$ W		|	7.0	G0 Ib	+ Sky		
$0^h 35^m$ W		|	7.5	B3	+ Sky		
$0^h 20^m$ W		|	6.3	K0			
$0^h 54^m$ W		|	3.0	F2 II			
$0^h 37^m$ W		|	4.3	G0 Ib	+ Sky		
$0^h 38^m$ W		|	2.24	F8 Ib	+ Sky		

319

Vdb, Mcl testing filters → 21:30

Date 13-14 June /65 **Observer** SK Lyse **Julian Day**

Sam Lyon

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
381-3245	α CrB	15 33.1	+26 50		5-4-2	28"		21 37		

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. 52°F

Transparency Conditions ~~very good~~ heavy clouds from NE at 2280

Focus

Dome Temp.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		0h 21m W		average	2 2 3	A0 V	.	heavy Clouds come up from NE	

– COULD WE PLEASE HAVE ONE OR TWO (LONG) PENCILS FOR THE DOME?

Date 15-16 June Tues-Wed **Observer** Hd MJ M / Jdb **Julian Day** ....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
28444	ε Vir	12 59.7	+11 13.7	G10	unbaked unspotted IIaOK	9(x)L		20 48	22 20 (46)	C
28444 F₁	focus test	in in	out out	G10	IIaO un.	9			MIDDLE	
382-1	HR 5270	14 00.8	+09 52		t = 20 sec				22 45	
-2	HR 5447	14 33.1	+29 54		〃				23 02	
-3	HR 5511	14 44.5	+02 02		〃				23 22	
-4	HR 5681	15 14.1	+33 26		〃				23 38	
-5	HR 5854	15 42.6	+06 32		〃				23 49	
-6	HR 5933	15 54.8	+15 47		〃				00 01	
-7	HR 5947	15 56.1	+26 59		〃				00 16	
-8	HR 6092	16 18.6	46 24		〃				00 34	
-9	HR 6588	17 38.4	46 02		〃				00 45	

28444 T — Calibration Step Wedge for plate 28444

Dome Temp. 57°F

Focus

Dome Temp.

CO_2 in 700V 21:45

Transparency Conditions 2240 OK NOT AOK
moon rather red when rising
clouds moving rapidly from SE at beginning #8

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		W 2 39	+.. 10	0-1	-3.8	G9 III	8/8	EQUIV. WIDTH PROGR total ÷ 40 counts at 21 50 #4 (30) {1828, 1858	fine
		MIDDLE					3/3	← no filter	
		W 2 03			6.12	G0 III	D²	C3, C5, C5, C6, C6 (55 : C2)	
		W 1 48			4.48	F2 V	1	C3, B4, B5, B6, B6, B6	
		W 1 57			3.76	A0 V		C2, B2, B3 B3, B4, B4	
		W 1 43			3.54	G8 III		B6, B2, B4, B5, B5, B6	
		W 1 27			2.75	K2 IIIp		B5 B1, B3, B5, B5 B6	
		W 1 25			3.86	F6 V		B6, B3, B4 B5, B5, B5	
		W 1 40			4.22	K3 III		C3 B3 B6 C3 C3 C4	
		W 1 35			3.94	B5 V		B6 B2, B3, B4, B3, B3	
		W 0 26			3.79	B3 V		B6 B2 B3 B3 B3 B3	
		W						01 00 — SOLID CLOUDS	

3 323

CLOUDY

Date Wed-Thurs 16-17 June 1965 **Observer** Cu **Julian Day**

	Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
28	28444 F2	Focus test	J-J-Ant		C40	IIaOb	13	60°F		
28	F3	"	"	"	"	"	"	"		
2										
2										

30/30

31/30

30/30 ~~no filter~~ Focus 62 c to r
30/30 Focus 68 good.

HANDBOUND
AT THE
UNIVERSITY OF
TORONTO PRESS

326

HANDBOUND
AT THE
UNIVERSITY OF
TORONTO PRESS